

The United States MILLER

AND THE MILLING ENGINEER.

Sixteenth Year.—No. 6.

MILWAUKEE, JUNE, 1891.

Subscription Price \$1.00 Per Year.

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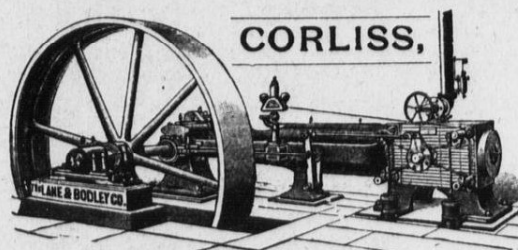
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




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 The most Compact, Durable, Best Sheller and Best Cleaner.
 Takes up but little room, runs at low rate of speed, requires no attention. It is in every respect the
Best Sheller ever offered to the Public.
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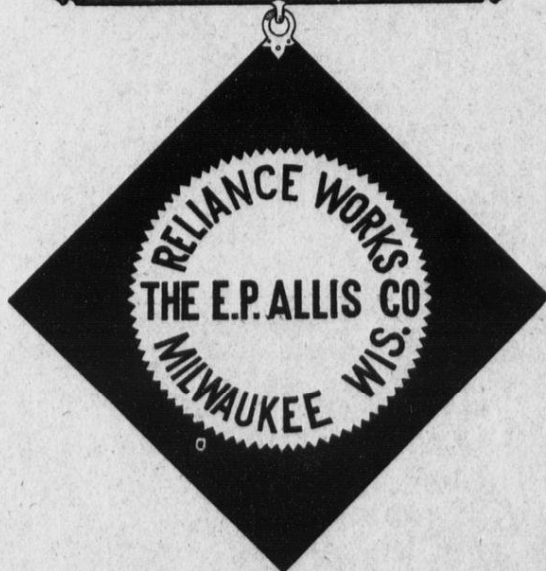


A MATCHLESS RECORD!












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	Minneapolis, Minn.		
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	Sumner & Stewart,	- -	2,000 bbls.
	Staten Island, N. Y.		
	Union Mill Co.,	- - -	2,500 bbls.
	Nashville, Tenn.		
	Lake of the Woods Mill,	-	1,500 bbls.
	Kewatin, Ont.		
	Colorado M. & E. Co.,	- -	2,500 bbls.
	10 mills, Denver, Col.		



RECENTLY ADOPTED BY THE FOLLOWING :

	Crown Roller Mill,	- - -	2,500 bbls.
	Minneapolis, Minn.		
	Washburn-Crosby "A"	- -	4,500 bbls.
	Minneapolis, Minn.		
	Columbia Mill Co.,	- - -	2,000 bbls.
	Minneapolis, Minn.		
	Zenith Mill Co.,	- - -	1,000 bbls.
	Minneapolis, Minn.		
	Jones & Company,	- - -	2,500 bbls.
	New York.		
	Listman Mill Co.,	- - -	1,000 bbls.
	LaCrosse, Wis.		
	Model Mill Co.,	- - -	1,000 bbls.
	Nashville, Tenn.		
	Mountain City Mill Co.,	-	800 bbls.
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	Thompson Milling Co.,	-	500 bbls.
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	L. M. Godley & Co.,	- -	250 bbls.
	Scottsville, N. Y.		

1891 Catalogue now ready.

THE EDW. P. ALLIS COMPANY

* Flour Mill Builders and Furnishers, *

RELIANCE WORKS, MILWAUKEE, WIS.

The United States MILLER

AND THE MILLING ENGINEER.

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MILWAUKEE, JUNE, 1891.

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THE TRACING BUREAU.

THE Executive Committee of the Millers' National Association have issued the following circular to all members:

MILWAUKEE, Wis., June 15, 1891.

DEAR SIR:—At the recent Annual Convention of the Millers' National Association, held at New York City, May 11, 12, and 13, the subject of the so-called "Millers' League" or "Tracing Bureau," was taken up for discussion, resulting in the adoption of a resolution: "That the formulation of a 'Millers' Tracing Bureau' be referred to the Executive Committee, with power to put the same in operation as early as practicable, it being understood that the expense of conducting said Bureau shall be borne by its patrons." In compliance with this resolution, the Executive Committee has prepared a plan, which is submitted herewith. As a preface, your attention is called to the fact, that, so far as all former plans for the organization of a Tracing Bureau, (proposed by the Executive Committee of this Association December 20, 1890, and submitted, first by Mr. A. M. Bailey, and subsequently through a circular issued by the Association, January 25, 1891,) are concerned, the same are dropped, and the plan as herein outlined substituted, and will be put into immediate operation. It is hoped that the subscriptions heretofore made by the members of the Association to the guarantee fund will now be renewed and considered binding.

It is proposed to form an organization to be known and styled as "The Millers' Tracing Bureau," which shall be managed by the Executive Committee of the Millers' National Association, the function of which shall be, to trace and hurry to destination shipments of flour made by members who may join this sub-organization.

Any member of the Millers' National Association may become a member of the Millers' Tracing Bureau, by signing an application, in which agreement is made to subscribe to the guarantee fund, for the support of said bureau, a sum not less than \$10 per unit, of one hundred barrels, of the daily capacity of the mill or mills owned, controlled or operated by the applicant; such guarantee to be payable in such amounts, and at such times as the Executive Committee may direct. Provided, that such application shall be approved by the Executive Committee.

The expense of operation of the bureau shall be borne by its members. A fee per sack, or barrel, will be charged for the service furnished, and monthly statements of accounts rendered, to be followed by sight draft.

It is believed that the patronage secured will make the Bureau self-supporting from the start, and that it will be necessary to call for but a small proportion of the guarantee fund, to be used for purchasing stationery and supplies; which amount may be returned to subscribers at a later date.

The Bureau will be conducted under the direction of the Executive Committee, until the next Annual Convention of the Millers' National Association is held, at which time a convention of the members will be called, and if desired, the organization may be perfected by adoption of a constitution and by-laws, and election of officers to manage the affairs of the sub-organization.

For the present, the service of the Bureau will be confined to tracing export flour shipments. The charge to be made for such service to be one-sixth of one cent. for 140-lb sacks, and one-fourth of one cent. per 280-lb sack or per barrel, on all shipments reported for tracing.

Upon acceptance of an application for membership, the member will be supplied with suitable blanks to be filled out complete, giving all information required thereby, which should be promptly forwarded to the Secretary of the Millers' National Association. The information thus given to be held and treated as strictly confidential. At the start, a representative will be placed at New York City, who will have assistants at Boston, Baltimore, Philadelphia, and all important sea-ports of the United States.

Upon receipt of advice of a shipment to be traced, the Secretary will at once report the shipment to the Representative at the sea-board, who will be on the lookout for the shipment, and upon arrival, see that prompt transfer is made to the steamship, and report any and all delays that may occur.

Should there be a delay at the sea-board which our Representative there may be unable to promptly overcome, an effort will be put forth from headquarters to correct the matter, and all members of the organization will be promptly advised of such troubles, in order that they may avoid shipping via routes which do not furnish proper and prompt service. As the requirements and patronage of the Bureau warrant, its field of operation will be enlarged, and agents will be placed at other important freight transfer points, such as Buffalo, Toledo, Chicago, St. Louis, etc. After successful operation in tracing export business, the Bureau may extend its action to the field of domestic shipments.

An arrangement has been made with an efficient and experienced man, to represent the Bureau at the sea-board, and as soon as the proper blank forms can be prepared, (probably within the next two or three weeks) it will commence operation; under this plan we can start with a smaller guarantee fund than we have heretofore thought necessary.

Every member of the Millers' National Association who is exporting flour, is invited and urged to join in this important movement. Enclosed herewith you will find a blank application and subscription to the guarantee fund. Please sign the same and return to the Secretary of the Millers' National Association at once. You will then be advised as soon as the Bureau is in readiness to trace your shipments.

We predict that the result of this movement will be of inestimable benefit to members, and trust that sufficient enterprise may be shown by the members of the National Association to insure its ultimate success.

By order of the Executive Committee,
FRANK BARRY, Secretary.

[Written for the UNITED STATES MILLER AND MILLING ENGINEER.]

MACARONI.

THIS article of food, the manufacture of which may be considered the chief industry of south Italy and Sicily, requires neither great means or skill in its production. Macaroni is the *semoule* or flour of wheat moistened with water, in the proportion of 16 pounds of water to 30 pounds of flour, kneaded until it assumes the requisite consistency, cut or pressed into the desired shape and thoroughly dried.

For the best Macaroni, the hard, semi-translucent varieties of wheat, grown in warm countries, which contain a large proportion of gluten, are used in the form of *semoule*; for the cheaper grades, common flour is used. Any intermediate grade can be made by mixing the two in various proportions. It is an article of daily household production in a large proportion of Italian families, the necessary articles therefor being very simple—a smooth board, a piece of marble for kneading and a common rolling-pin. The household process is as follows: One pound of flour is mixed with four or five eggs, moistened with water at 160 degrees Fahrenheit, kneaded a few minutes and then rolled very thin with the rolling-pin. After drying on the kneading board for some 15 or 20 minutes until the surface loses its adhesiveness, it is rolled up tightly,

and thin slices are cut from the ends. The slices, falling apart, constitute strings of Macaroni, and are ready for use. Thousands of small factories are scattered throughout Italy, and are operated entirely by hand. The proprietor, with one or two workmen, make the Macaroni, and the wife sells it. The machinery is inexpensive and the hired labor costs from 30 to 70 cents per day, according to locality. Their machinery generally consists of a mixer, a kneader and a press. The large establishments are furnished with the most approved modern machinery and are operated by steam power. They generally buy wheat and prepare *semoule* and flour, not only for their own use, but for the market. The largest Macaroni factory in Rome has four steam boilers, 7 feet in diameter, and a Compound Corliss engine. Being thoroughly cleaned, the wheat, in this factory, passes through ten successive pairs of rollers, each pair being grooved smaller than the preceding pair, before it is crushed into the proper degree of fineness for *semoule*. The *semoule* must be hard, strong, granular and entirely free from dust or flour. When the quality is right, the Macaroni made from it can be boiled an hour without losing its shape or becoming soft. From the floor above two measuring spouts run to each mixer, so that the quantity of *semoule* in each charge is uniformly the same. Hot water having a small quantity of saffron in solution is added, the quantity being accurately measured for each charge.

From the mixer the dough is taken to the kneader, where it is well kneaded. The bed of this machine revolves slowly and the wooden bar above it is worked up and down on the dough. The dough is still further kneaded by being passed a number of times through a pair of rollers which are geared so as to automatically reverse their direction as soon as the charge has passed through either way. The dough is now ready for the presses. These have double cylinders, revolving on a central pivot, so that while one cylinder is in position the other is free to be cleansed and charged, ready, in its turn, to be revolved into its place in the press.

The presses are operated by hydraulic power, the pressure being 3,600 pounds to the square inch. The small and fancy-shaped Macaroni is made in horizontal presses. Cutters revolving more or less rapidly near the face of the die, according to the length required, cut it into any desired length.

From the presses the long Macaroni is carried on light bamboo sticks to the drying rooms. The small and fancy-shaped are dried on screens, consisting of wooden frames about 2x6 feet, covered with a coarse cloth so as to allow a circulation of air.

The drying of the Macaroni is the most difficult and delicate part of the manufacture and depends much on the state of the atmosphere. It is first

dried in the open air, whether in the sun or shade depending on the temperature and dryness of the atmosphere. The time depends on the size of the macaroni, from half an hour to three hours. It is then carried to a close damp room to rest, where it remains perhaps twenty four hours. The room is kept sufficiently damp by small steam jets or by the evaporation of water. This rest is a retarding process, and is intended to prevent the surface of the Macaroni from drying too fast, as it naturally would, and to allow the interior to harden. When properly rested, it is carried to large, spacious rooms that have thorough ventilation, either natural or artificial. For export, Macaroni is packed in cases containing 24½ pounds.

THE VESSEL MUST PAY FOR SHORTAGE.

BUFFALO vesselmen do not relish a decision just rendered by the Court of Appeals of the state of New York. In the fall of 1889 the steamer R. R. Rhodes fell short 820 bushels on a wheat cargo from Duluth. The shortage was charged to her and her owners sued to recover it. The case was tried before the Superior court at Buffalo and a verdict gives for defendant. Plaintiff carried it into the Supreme court, which affirmed the verdict. Then it was appealed to the highest court in the state and again the verdict against the vessel has been affirmed. This is the first time a shortage case has been decided by the Court of Appeals.

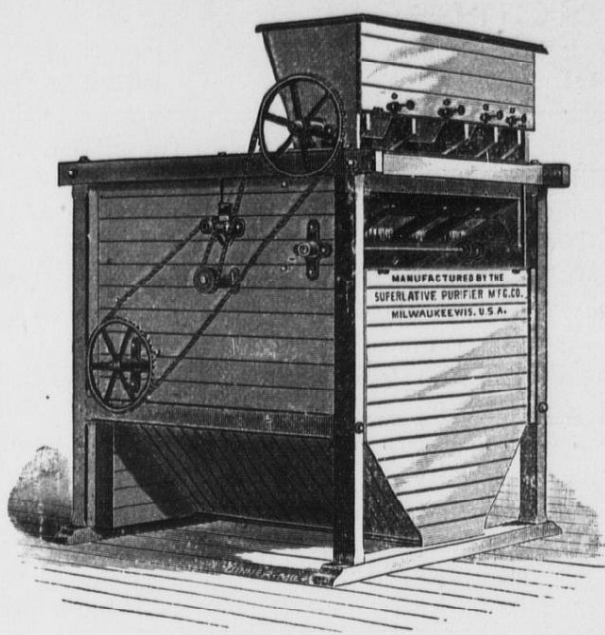
It is a well-known fact that grain in transit absorbs moisture to a more or less extent, depending, presumably, on the state of the weather, and consequently, should, at its destination, exceed in weight what it was on being received aboard a vessel. The deduction therefore is, that in case of shortage at point of delivery, either an error was made in weighing from elevator to the vessel, at point of shipment, or a similar error in transferring from vessel to elevator at point of delivery, or that short weight was given at either point from some cause, intentional or otherwise. It is not reasonable to infer that any quantity of grain could be abstracted from a vessel's cargo while in transit and shortage could not occur from leakage, as it possibly might from cars, and we can conceive of no other cause than that stated. The shortage in this case was very large and we are informed that shortage of any amount is quite unusual, the result, generally, being an overplus of small amounts, as it, undoubtedly, in the nature of things, should be, in which case the vessel owners profit thereby. Such being the case, that is, if vessel owners receive the benefit of whatever the surplus amounts to, they should, certainly, be required to furnish the full amount called for by the bill of lading, and to that end should by proper means insure to themselves a correct weighing at both receiving and discharging points.

"We are only sorry we did not place one in a year ago"

Don't put off buying the machine referred to. Every day will add to your regret that you also have not put in a

NEW ERA SCALPER

Occupies small space, Requires nominal power and Does not scour the bran.



One machine will handle four breaks in a 100 bbl. mill or one break in a 500 bbl. mill.

PRICES LOW.

RESULTS GUARANTEED.

TRIAL ALLOWED.

NEW PHILADELPHIA, O., March 9, 1891.

SUPERLATIVE PURIFIER MFG. CO., Milwaukee, Wis.:

Gentlemen—We started the Scalper the 7th, and it is giving good satisfaction. We can see quite a difference in the color of our flour, and are making more middlings than we did with our old reels. We are only sorry that we did not place one in a year ago.

Yours truly,

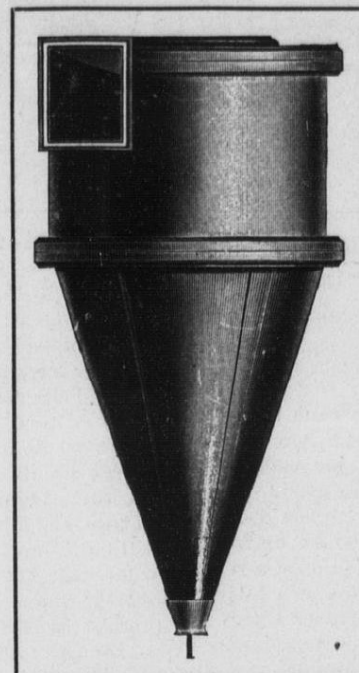
J. & O. C. JUNKINS.

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SUPERLATIVE · PURIFIER · MFG. · CO.,
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WELL BUILT
AND FINISHED.
GUARANTEED
TO DO
FIRST-CLASS
WORK, AND
TRIAL ALLOWED.
PRICES LOW.



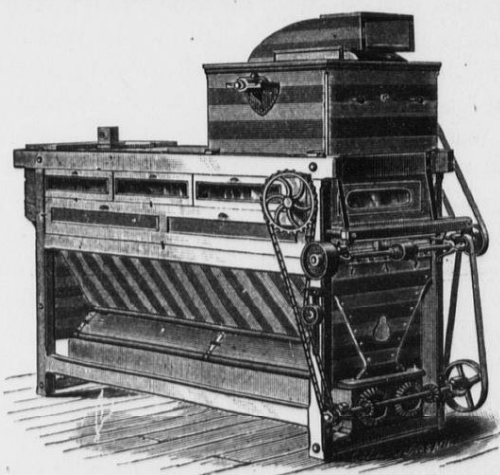
FULLY COVERED
BY PATENTS.
IT INFRINGES ON
NO OTHER
MACHINE, AND
WE GUARANTEE
EVERY USER
AND PURCHASER
AGAINST SUITS.

Thousands in use in all parts of the country on Purifiers, Grain Cleaners and other dust producing machines.

FOR CIRCULARS, PRICES, ETC., ADDRESS

VORTEX · DUST · COLLECTOR · CO.,
MILWAUKEE, WIS.

The Superlative Purifier



A FIRST-CLASS MACHINE, AT LOW PRICES.

Guaranteed to do as good work as any Purifier on the market.

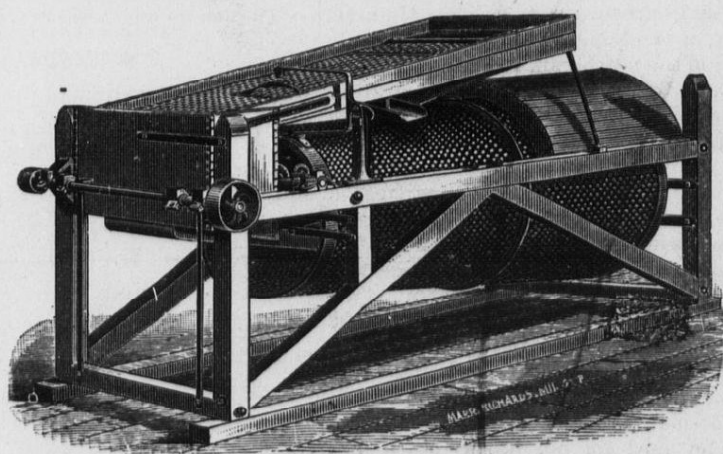
WELL BUILT AND FINISHED.

Thousands in Use. * * * Trial Allowed.

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SUPERLATIVE PURIFIER MFG. CO.,
MILWAUKEE, WIS.

The Kurth Cockle Separator



IF you want a Cockle Separator, write us. We can satisfy you both as to style and price. We build machines with reel or shaking graders, and with steel or zinc cylinders, as desired. Also in connection with Richardson's Dustless Oat Separator Attachment.

PRICES GREATLY REDUCED.

WE are manufacturers of Perforated and Indented Metal, and solicit orders for anything in this line, which we can fill promptly.

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COCKLE SEPARATOR MFG. CO.,
MILWAUKEE, WIS.

UNITED STATES MILLER

AND THE MILLING ENGINEER.

E. HARRISON CAWKER, EDITOR.

PUBLISHED MONTHLY.

OFFICE, NO. 124 GRAND AVENUE, MILWAUKEE.

SUBSCRIPTION PRICE—PER YEAR, IN ADVANCE.

To American subscribers, postage prepaid..... \$1.00

To Canadian subscribers, postage prepaid..... 1.00

Foreign subscriptions..... 50.

All Drafts and Post-Office Money Orders must be

made payable to E. Harrison Cawker.

Bills for advertising will be sent monthly, unless

otherwise agreed upon.

For estimates for advertising, address the UNITED

STATES MILLER AND THE MILLING ENGINEER.

[Entered at the Post Office at Milwaukee, Wis., as

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MILWAUKEE, JUNE, 1891.

We respectfully request our readers when they write to persons or firms advertising in this paper, to mention that their advertisement was seen in the UNITED STATES MILLER AND THE MILLING ENGINEER. You will thereby oblige not only this paper, but the advertisers.

THE Pennsylvania Millers' Association will meet in the Logan House, Altoona, Pa., Sept. 9, 1891.

THE European excursionists have had a grand time of it visiting the foreign cousins, according to reports printed in the British papers. The first section of the party sailed for home on June 3d, and the later contingent on the 10th.

WE have received and read with interest a pamphlet written by Harry P. Robinson entitled "Our Railroads." It is an able essay and we wish it could be read generally, especially by that class of people who are "agin the railroads anyway" good or bad.

STATISTICS show that 400,000 immigrants have arrived in this country during the past ten months, and close observers at the ports of entry are of the opinion that the general character of this influx of population from foreign sources is less desirable than in former years. The question which stares our people in the face is, "What are we going to do about it?" Certainly no undesirable immigrant should be admitted to American citizenship, but there is still room for industrious, law-abiding foreigners.

THE MILLER of London in its June 1st issue, contains a lengthy report of the visit of the party of American millers, reporting verbatim the toasts and responses at banquets given at Tarbet and Richmond.

In speaking of the personnel of the party THE MILLER says: "Our transatlantic visitors include forty-eight millers, whose pilgrimage is shared by eleven ladies and two children. Willie Edgar * * * although no patriarch in years, may, in one sense, be called its father. Oh! papa Willie! Mother will be pleased!"

THE Executive Committee of The Millers' National Association has perfected plans for the organization of a flour tracing bureau, and will submit the same to the members by a circular letter, a copy of which we publish in this issue. It is intended to confine the action of the bureau for the present to tracing and hurrying forward export shipments, and arrangements have been made with a competent representative to act at the sea-board. A sufficient guarantee fund has already been subscribed to insure the inauguration of the enterprise, we are informed; though it is hoped that the movement may receive general support from all members of the National Association, and that sufficient enterprise will be evinced in signing the guarantee fund required, to put the bureau squarely upon its feet and enable it to be made what it should be from the start. If

millers do not appreciate the great benefit to be derived from the organization of this sub-association, they deserve to suffer the impositions and hardships at the hands of transportation lines, regarding which they have so long bitterly complained. We hope that every exporter of flour will put his shoulder to the wheel, and heartily support the proposed tracing bureau.

THE announcement is made under date of June 6th, by E. L. Burdick & Co., publishers of *The Roller Mill*, that the "*Honest Miller*," heretofore published by Mr. Geo. B. Douglas, of Silver Creek, N. Y., has been purchased, and will hereafter appear as "a special department" of *The Roller Mill*. The "*Honest Miller*" doubtless found life to be a burden in a field where there is so little to be "funny" about. It was too young to be much missed, and, taken all in all, perhaps the world will be better for its having died.

By combining an amusement feature with its many excellent qualities, *The Roller Mill* will add to its growing popularity, and possibly be able to still further counteract the baleful influences of Buffalo's "open sewer."

AN English editor of a New York daily thus arraigns Russia the land of the despot and the serf:

"Russia is the curse of modern civilization; the negation of its spirit, the counteractant of its intellectual forces; the embargo on its social advance; the antagonist of its political progress. She stands for ignorance as against intelligence; for class against mass; for autocracy against democracy; for absolute despotism against constitutional liberty; for race antagonisms as against international amities; for war against peace. Her highest conception of national greatness is the organization of armed brute force. The chief end of her government, her commerce, her wealth, her vast numerical resource, is the creation of military power. She exists to oppress, to repress, to aggress, to invade, to destroy. She stands out among the European nations as the one country that effectively confronts the elevating forces of modern progress with brute resistance. That is her function, her mission among the nations."

AMONG the reports of our consular representatives in the April volume of the State Department Consular Reports is a most important communication sent by Consul-General John C. New, of London, bearing date February 10, 1891. The communication contains a letter received from the London Flour Trade Association by Mr. New respecting the shipment of flour direct from mills in the United States to the United Kingdom, also a copy of Bill of Lading given on a through shipment of flour from Minneapolis, Minn., to London, Aug. 25, 1890. The export trade is of great importance and any plan tending toward the regulation of shipping facilities should be furthered. Most of our shipments of flour to Great Britain are on through bills of lading, direct from the American miller to the English dealer. Out of a total export, in 1890, of 29,226,863 cwt. of wheat and flour, 12,025,800 cwt. was shipped in this form. It is claimed, in the letter of the Flour Trade Association, that the American railroads, practically acting as common agents, and according to the bill of lading given to shippers, having made no contract with a time limit, take any time, from four to sixteen weeks to get the flour to its destination, and the terrible irregularity of the service has reached such a pitch that the trade generally is most seriously hampered and the result is in-

jurious to American millers, inasmuch as a large discount in price has to be allowed the buyer on account of the risk taken. These grievances are brought to the notice of the Consul-General, with a view to his embodying the facts in his report to this Government and with the hopes that its assistance may be enlisted and the abuse remedied.

WE are pleased to see that our Government, through its Commissioner of Labor, is properly interested in industrial and manual training schools, as is evidenced in the fact that inquiries of an extensive nature are being made as to the results obtained thereby. We have advocated the establishment, in this country, of flour-milling colleges, wherein young people may be taught, as far as possible, the theoretical and practical requisites of this very important branch of the country's manufacture. Actual experience in a regular flouring mill is a good educator to the business, but the fact is, that the knowledge which would be readily imparted to pupils, by tutors in an established public college, would be withheld to a more or less degree by head-millers in private establishments, on the principle that such matters were not included in their duties, as they are employed to operate the milling machinery according to the best of their knowledge, obtained through experience and observation, and not to impart to others such knowledge as would make for their competitors and probably cause their displacement or, on account of surplus of obtainable ability, cause a reduction in the remuneration received. In regularly established colleges, where professors are engaged and paid for instilling knowledge, and who naturally take pride in producing exceptional examples of their ability in that direction, such excuses would not exist, and we hope to see the time when a college of milling, on an extensive scale, will be established in this country, as they now are in Germany and France. A college of milling in Paris, France, but lately established, now contains over 100 students.

"TOO many irons in the fire" has been the cause of the downfall, financially, of many who otherwise might have succeeded. Persons doing a reasonably paying business, which, from practical knowledge, they thoroughly understand, should adhere to that to the exclusion of all unnecessary "side issues". Improve it by all justifiable means. Let the world know what business they are in and by their action in conducting such business convince all with whom dealings are had, that all transactions are conducted upon a basis founded on true knowledge and integrity. Avariciousness is the cause, in most cases, of persons undertaking to carry on two, three and often more separate and distinct branches of business at the same time. Success in the original undertaking has probably enabled the laying aside of a few hundreds or perhaps thousands of dollars, and an opportunity presents itself, through the glowing representations of interested party or parties, where this "nest-egg" can be made to bring in additional dividends to that already being realized from present business, and the picture is so well word-painted, the result so well assured, independence, as to wealth, so certain to the investor, that the accumulated savings are invested, and what?

Possibly good results and possibly not. In either case a certain amount of mental work is entailed, either to the detriment of the original business, or to additional strain on the brain capacity. And this in hopes of attaining the coveted goal more speedily. But the *ultimatum* is never reached. Though, in case of success, a point is marked out, when attained, the desire is not satisfied and a higher standard is planted, to be again advanced in due time, while in case success of the new venture depending on financial aid being represented, the chances are that in order, as is supposed, to save what has already been advanced, the original business is crippled to provide a crutch for the forthcoming bonanza, which in the end, probably falls helpless and carries with it what might otherwise have stood. Let well enough alone.

THE accompanying circular is being scattered throughout the land:

MILLS BUILDING, 38 Wall Street,
NEW YORK, May 1, 1891.

DEAR SIR:—I beg to call your attention to the following claim contained in Letters Patent of the United States, granted to Andreas Mechwart of Buda Pesth, Hungary, for an Improvement in Mills for Grinding Grain, to-wit:

"In a mill for grinding grain or other material, a pair of chilled cast-iron cylinders, the surface of which are obliquely grooved in the same direction in combination with mechanism for revolving both rollers at different speeds, substantially as set forth."

The majority of all the roller mills in use in the United States contain pairs of rolls constructed and designed to operate as described in the above quoted claim. You will observe that, if such rolls are in use in your roller mills, they infringe the claim quoted from the above patent.

As it is not designed to interfere with the business of those who are using such rolls, you, among others, are requested to make settlement for the infringement by payment of royalty upon all pairs of rolls now in use in your mill.

It is the intention of the owners of the Mechwart patents to deal leniently with those who will voluntarily make a settlement; otherwise suits will be begun to restrain the use of such rolls, and for damages.

For the information of the trade generally I would state that suits have been begun against the Consolidated Roller Mill Company, through The John T. Noyes Manufacturing Company of Buffalo, and other suits will shortly follow. Respectfully,

GEORGE H. BENJAMIN.

We are informed that suits have been entered under the above mentioned patents, against the John T. Noyes Manufacturing Co. of Buffalo, N. Y., and Stillwell & Bierce Manufacturing Co. of Dayton, Ohio. These Mechwart patents bade fair some years ago to create considerable disturbance in the milling world, but it is said that, owing to lack of sufficient funds to combat with the organized body of millers, action in the matter was deferred. Whether the present owners of the patents are prepared to furnish the necessary amount of money, which will be called for by litigation so extensive as these suits must necessarily be, or not, is a question, but they seem to be putting on a bold front, and we should not be surprised, if in the near future, there would be "music in the air." Millers who have refrained from joining the Miller's National Association, because they "cannot appreciate the benefits to be derived from membership in any direction except in that of patent litigation, and because all seemed quiet in the field of patents," are liable to find that the "Old National" is of inestimable value to those who have remained within its ranks.

The Executive Committee of the National Association, appreciating the value of agreements, which would insure protection to their members from roller mill litigation, secured a cast-iron bond, executed by the four firms which compose the Consolidated Roller Mill Co., which bond is in the sum of \$100,000, and binds those manufacturers to provide defense, and secure from all harm, all members of the National Association, who may purchase and use their roller mills. This bond will save the members from all expense and trouble, which may follow litigation as suggested by the above circular. Millers who have preferred to insure themselves against patent suits, rather than to pay the small fee necessary for membership in the "National," may have an opportunity to enjoy the privilege of their own underwriting.

CORRESPONDENCE.

[The following letters are all from our own special correspondents, and reflect their views and the views of the trade in the location from which they write.]

OUR LONDON LETTER.

The Weather—Advance in Price of Bread—Result of an Advance in Bread 100 Years ago—The American Millers—Steam Flour Mills at Pekin, China—France Alarmed at Shortage of Wheat.

DURING the month of May the weather has been most unseasonable; the country generally being visited with hard frosts at night, and snow and hail storms during the day, with the result that the wheat plant has gone off color and is often thin on the ground besides being universally of backward growth. Such harvest prospects at the end of the month of May kept the high prices of a month ago at about the same level, in spite of the quantity of Indian wheat that is being sent to this country. The average price of wheat for the first week in May was the highest since 1883, and this had the result of making bread 2½d. per gallon dearer in many districts of the country. Happily the result of higher prices is not so serious as it would seem to have been rather more than one hundred years ago, for according to the *Universal Magazine of Knowledge and Pleasure*, bearing the date Aug. 26th, 1766, when the result of a similar rise in the price of wheat, was as follows:

"We hear from Newbury, in Berkshire, that on Thursday last a great number of poor people assembled in the market place during the time of the market, on account of the rise of wheat, when they ripped open the sacks and scattered all the corn about; took butter, meat, cheese and bacon out of the shops, and threw it into the streets, and so intimidated the bakers that they immediately fell their bread 2d. in the peck loaf, and promised next week to lower to 8d. per gallon. From Newbury they proceeded to Shaw Mill, where they threw the flour into the river, broke the windows of the house, and did other considerable damage there, as well as at several other mills, to the amount of nearly £1,000. A poor man, whose name was Parker one of the mob, was killed, who has left a wife and five children; another man had his arm broke, but we do not hear of any further accident. They threatened to proceed farther if provisions were not lowered."

On the 1st of this month, June, this country had its first day of summer, with the result that the Mark Lane market, although there was a large attendance of the party of American millers who are now on a visit to Great Britain, was very slow and prices were inclined to be easier. Sellers manifested impatience at the "waiting policy" shown by buyers of wheat, who however, will not buy heavily, as there still remains a good chance of a splendid wheat harvest in Great Britain. Your readers will, no doubt, recollect reading in your journal a few years ago, your quotations from the *Miller*, of this city, with reference to State granaries, which that journal advocated should be established in order to have enough food in the country to feed the people in case of war. During the past week the French Government has become alarmed at the existing shortage of wheat and other breadstuffs in the chief centres, and they have come to the conclusion that the Ministry of War should stock all their fortified towns with two months' reserve supplies of wheat or flour to feed the inhabitants within the towns in case of siege during war. In towns where the population exceeds 40,000, half the cost of forming these reserve stocks will be borne by the municipalities. The total cost, it is calculated, will be about £1,750,000, and about 750,000 qrs. of wheat or flour will be required for the purpose. The operation of securing

this large quantity of grain, on account of the bad outlook in Europe will be carried out gradually instead of by taking up the whole quantity from the current supplies.

The party of American millers broke up this morning, some proceeding from here to Paris, some to other parts of the Continent, others remaining in London and some returning to Liverpool on their way back to their homes in America. The party which consisted of 48 gentlemen, 11 ladies and 2 children, arrived at Liverpool on Wednesday, the 20th of May, and were received by a committee of members of the Liverpool Corn Exchange, and conducted to their hotel. On Thursday, the 21st, the American milling party, in company with about 40 members of the Liverpool Corn Exchange paid a visit to the old English city of Chester, where they were welcomed by the mayor and conducted around to some of the most interesting portions of this old city. After lunch, which was provided in the Town Hall, the party paid a visit to Eaton Hall, the residence of the Duke of Westminster, after which the return journey to Liverpool was made. Sight-seeing occupied the whole of Friday, the 22d, and a great deal of time was devoted to the inspection of the Liverpool docks, the Waterloo grain warehouses and the warehouses in the Alexandria docks. On Saturday, May the 23d, the American party took special train to Edinburgh, which city they reached the same evening and were welcomed by a committee of the Edinburgh and Leith Flour Trade. On Monday, the 25th, the local committee took the party for a trip to the Forth Bridge in a special steamer. The company, including the Provost of Leith, a number of local millers and the American consul, Mr. Wallace Bruce, took luncheon on the saloon deck as the steamer was nearing the bridge. After thoroughly inspecting the bridge the party returned to Leith and in due course made their way to their hotels in Edinburgh. Early next morning, Tuesday the 26th, the visitors set out for Sterling, where they visited, after having partaken of breakfast in the Royal Hotel, the castle of that ancient and historical town. After leaving Sterling the party proceeded through the "land of the Macgregors" to Aberfoyle to the Trossachs Hotel where they were met by their Glasgow hosts—members of a committee of Glasgow flour importers and merchants—and entertained to luncheon. After lunch the company proceeded to Loch Katrine where they embarked on board a steamer which conveyed them to the top of the lake in a down pour of rain, which continued most of the time occupied by the coach run of six miles from Stranachlachar, which is situated near the top of Loch Katrine, to Inversnaid, on the shores of Loch Lomond. A steamer, specially chartered by the Glasgow Reception Committee, took the party up the Loch as far as Audlin and then "turned about" and proceeded to Tarbet, where dinner was served in the hotel of that place to a company of over 100 persons, including the American Consul at Glasgow, Mr. Levi Brown. After dinner and before the speeches, the loyal toast of Queen of England and the President of the United States was given by the chairman, and by way of honoring the first part of the toast the first verse of the National Anthem was sung, after which the American visitors, led off by Mr. H. B. Sanderson, of your city, sung the

first verse of the American National Ode most enthusiastically. After dinner the company re-embarked on the steamer and proceeded down the loch to Balloch, where they took train to Glasgow, thus closing a long day's travelling which was accompanied with much real pleasure. The following day, Wednesday, the 27th, was given up to sight-seeing and visiting the Regents Flour Mill as well as several of the large baking factories. On Thursday morning, the 28th of May, the party left Glasgow for London, where they arrived late in the evening of the same day. The following day was given up to sight-seeing and shopping and on Saturday, the 30th, the visitors became the guests of the London Flour Trade Association, who organized a trip for one section of the party including the ladies, by special train to Windsor Castle, returning by a steam launch down the Thames to Richmond. The larger party took a special train to Richmond and were driven through Richmond Park to Hampton Court, where they were shown the Palace and grounds. They were then driven back to Richmond and joined the gentlemen who had returned from Windsor, at the banquet given by the London Flour Trade Association at the Star and Garter, Richmond. After a bountiful feast and a number of speeches the company broke up and boarded the special train, which carried them back to London. On Sunday the party dined together, and yesterday, Monday, 1st of June, visited various sights in London, while a large number attended Mark Lane market. Today the party dispersed, some leaving London to visit friends in other parts of England, or on the Continent and others to return to their homes.

The *Temps* states that the uncertainty existing concerning the future increase of the import duty on corn had caused ten mills in Marseilles to cease work, whilst a further batch of ten are only working two or three days per week. Forty other mills propose to suspend operations as soon as their stocks are cleared, and this will throw 20,000 men out of employment. The correspondent of the same paper states that the closing of the mills after that of the spirit distilleries will complete the disorganization of Marseilles trade.

The National Association of British and Irish millers have decided to hold their annual convention this year in Northampton on July 7th, 8th, 9th and 10th, and a most enjoyable programme has been arranged by the President, nominated by the Council for the coming year, Mr. Joseph Westley, of Northampton. In my next letter I will give you the programme in detail, but I have heard that Earl Spencer, K. G., will be present and take part in the proceedings.

The American millers will be astonished at the latest news from China, which states that the Imperial government has granted permission for the erection of two steam flour mills in Pekin, and these are, if successful, to be followed by three others. The mills are to be under the management of a large piece goods firm in Shantung, and the order for the necessary machinery was placed, in March, with a foreign firm at Shanghai. This development is said to be due to the favor with which the Emperor and Empress received some cakes provided for them in 1889 by the late Marquis Tseng, made from foreign flour. X. Y.

LONDON, June 2d, 1891.

OUR BUFFALO LETTER.

Receipts and Shipments of Flour—The Market—Canal vs. Rail Freights—New Macaroni Works—Items of Interest—Personals, etc.

CAPT. THOMAS COLLINS, of this city, one of the best known navigators on the chain of the Great Lakes, died suddenly at his home here, June 6th, aged 59. Capt. Collins was no ordinary man, and it can honestly be said of him that there is more sincere sorrow at his untimely taking off, than has been expressed in this city for many years. Upright, bold and true to his friends, with a long, clear head, and a judgment so keen that even his worst enemies respected him. He had but few of the latter. His was an eventful life. Early at sea he drifted into many lands, returning some twenty years ago to settle down in Buffalo. The resolution passed by the Merchants' Exchange, of which he was an honored member, fitly expresses the feelings of all: "His rugged adherence to the right in all matters pertaining to the public and private interests, has made him a place in this Exchange that will cause his loss to be deeply deplored." Flags on the shipping were lowered to half-mast, out of respect to his memory, and his funeral was attended by a large body of our most respected citizens.

The receipts of flour by rail from the opening of navigation to June 15th, were 1,518,000 bbls. against 1,200,000 for the same time last year; of grain 19,072,000 bush. against 28,600,000 last year.

Railroad shipments from opening of navigation to May 15th, 10,200,000 bush. against 11,900,000 last year. The canal carried 6,400,000 bush. since May 5th against 10,200,000 last year.

The Imperial Mill Company of Duluth, is making what appears to be a foolish attempt to gain a penny or two by sending down its flour in vessels outside of line boats. This is all right in its way, but considering the power of these through lines, it would pay better to give them the business.

The Attica Mills are flourishing under the management of Mr. Charles Bork. Work will soon be commenced on a new office 20x30 feet on the northeast corner of the present building, extending over the creek. The present office is a dingy, unhandy affair, altogether too small for the increasing business. A new cupola has just been completed on the big mill.

Head miller C. Schroeder of the Attica Mills, is one of the fire laddies of that village, and made the trip to Lockport with the "hooks" a week ago. Mr. Bork and his business manager, A. A. Gillespie, are also full-fledged firemen, and run with "de masheen" in Attica.

All of Pillsbury's damaged flour will be repacked in the new Lackawanna house here. This work was heretofore done in Paterson, New Jersey.

Mr. Shuttleworth, of the Banner Milling Company, has the sympathy of the Merchants' Exchange in the loss of first his mother and a few days later a loving and devoted sister.

It is quietly rumored that that stupendous bucket shop, the New York Produce Exchange, did itself proud in the entertainment given the millers. You bet—and the visiting millers will not forget it either.

The West Avenue Mills in Attica, N. Y., are figuring to put in the patent Pennsylvania oil burners to replace coal.

Duluth wheat has held its own in this market above all expectations. Some millers secured bargains in Minneapolis, special lots to arrive from Duluth at 5@10c under the market, but outside of this limits have been well maintained, and wheat is no cheaper than it was a month ago.

Corn has numerous friends here on the outlook which is considered excellent for light receipts and a consequent advance in prices. Quite a number of the best old heads have a jag or two on hand.

The wheat crop in this country at present is the best on record. Every field is grand and the farmer is banking on a propitious yield. Oats are looking poorly, owing to dry weather at the start.

C. J. Mann's floater has had a sorry time of it. One accident after another has been its misfortune since starting in to break the Association. Several men were injured and a quantity of good wheat wasted in the desperate endeavors to unload a cargo of 25,000 bushels in two days. Mann's floater will never "bust" the Association, nor a dozen like it.

It is astonishing how our country cousins are coming to the conclusion that they are as good men as "Old Hutch." I find new faces from the country in our broker shops every day and from their conversation it is evident they are in it deep. A successful play on the part of one "farmer" is a good investment for our regular bucket shops as it is sure to bring in the poor suckers in droves, anxious to be scaled. Stick to the farm.

Business has been dull at Wright's and the lesser halls of speculation. A change in prices is greatly needed. Pork is the deal for a sharp advance in most places. Prices of flour have been very unsteady. Spring Patents were sold in car load lots at \$5.75 and \$6.00 to jobbers. Winters were offered at \$5.35@5.50. Straight Spring, \$4.85@5.25; do. Winter, \$4.25@5.00; Red-dog, \$2.25@3.00. Rye flour is quoted at the old prices of \$4.75@4.95.

Taking the shortage of grain cargoes into consideration there is no money in vessel property this year. All ports are alike, with perhaps Duluth taking the lead as usual in "stealing" wheat. Masters of vessels trading with the latter port are doing some tall cursing.

Mr. Wm. Meadows and Mr. Pierre Russell have formed a co-partnership under the firm name of Wm. Meadows & Co. They will deal principally in Duluth wheat. This is December wedded to May, the difference in ages being about 35 years.

Canal freights dropped to the lowest rate in the history of this big ditch, namely, 2½ cents on wheat to New York. This beat the rail and consequently the roads withdrew. Rates then advanced to 3½ on wheat by canal, but the rail appears to have enough of this kind of fighting for the present.

Mill feed has been rather unsettled. Several lots brought down by lake were forced on the market and went at a low price. These were picked up by Heinold & Rodebaugh. Coarse Winter Bran and Mids sold at \$16.50 and Spring at \$15.00@15.50; Fine White Feed is held up to \$23 per ton, owing to light offerings and good demand.

Several country mills in this vicinity have shut down, among them being the Newman mill at Akron, and Parsons & Co.'s of Batavia.

Mr. L. Simons of Chicago, is visiting his brother, N. Simons, and will remain

for several months. If the Cheeryble Brothers, made famous by Charles Dickens, ever had a counterpart it is in these two old gentlemen. They are inseparable, and to hear them talk and watch the attentive listening when either Nate or Lon makes a remark is a rare treat.

The late Millers' Convention was, judging from the silence maintained by the Buffalo delegates, not of a satisfactory character. Not one of them is willing to talk.

It has certainly been dull in the flour trade, but when compared with last year it does not look half as bad as some millers are inclined to make it. The stoppages were less frequent and of shorter duration this year and the stocks on hand are no larger. In fact if eastern purchasers would order it out with the same rapidity they did last year the supply here would be light enough to advance, or at least hold prices exceedingly firm. Some of these days the position will change suddenly. We have these dull times about four times each year and I have never known it to fail.

Secretary Thurstone, of the Merchants' Exchange, has returned from Atlantic City, where he has been the past six weeks in search of health. He shows considerable improvement but hard work will again bring him down.

Secretary Daly, who has also been absent for two months with a serious attack of rheumatism, is on deck again and will probably recover entirely when warm weather comes. At least this is the heartfelt wish of the members of the Exchange, who have greatly missed this valuable servant.

The case of Stephen Sherman, sentenced to five years in the state prison, was argued on appeal in the General Term Supreme Court June 5th. The attorneys for Sherman made able arguments trying to show that "Steve" did not intend to do wrong but that his wicked brother probably was responsible for the theft of 350,000 bushels of good wheat and the mixing of 300,000 more. The case was submitted. Steve will come back to Buffalo some of these days and catch a bigger mess of suckers on a bare hook than he did before. Sure.

More discrepancy comes to light in the Dakota elevator, which probably may be added to the other relics of the Sherman Bros.' misdeeds. About 2,200 bushels of ungraded wheat which, rumor says, had been shipped here by the Shermans for the purpose of mixing with the standard grades of hard Duluth wheat, are missing. The elevator in question shows a reluctance to settle the matter with the owners of the wheat, and another law suit, which will, no doubt, bring to light some more infamous transactions in the nasty elevator scandal is among the possibilities.

As an instance of Yankee enterprise I would like to have the following go on record. When Mr. A. R. James heard that Pierre Russell intended to start on his trip around the world, he packed up a neat bundle of 2,000 small labels of his famous "Bridal Veil" flour, and in all the earnestness which his glib tongue is capable of producing, actually got Mr. Russell to take them with him to plaster up the dead walls of all the ancient towns he visited, particularly on the Pyramids of Egypt.

"Clint" Newman returned quite unexpectedly from the Millers' Convention at New York. Everyone on 'Change was surprised to see him before the adjournment, and tried to get a satis-

factory explanation of his early arrival. "Clint" stuck to one story and that was: "I got tired of the crowd." It was left for Mr. George Urban to give the true inwardness of the reason why. When asked about it, Mr. Urban said: "Why 'Clint' took what he thought was the elevated train and waited for the conductor to call out 42nd street. The first he knew the train hands were shaking him and yelling: 'Buffalo! Buffalo!'"

The affairs of the Buffalo Forwarding Company are in the hands of W. C. Jacus for final settlement. The furniture in the office was auctioned off last week and Joe Hadcock, in order to show his innate cunning, attempted to bid up the price of a long desk which he thought the new occupants of the office must have. The boys helped the bidding on and finally knocked the cumbersome piece of useless furniture down to him at his own figures. Half an hour after the purchase he was given notice to remove the desk forthwith or storage would be charged. Joe is ready to settle at a loss of \$5, but the boys cannot see him for less than \$10 and a bottle.

Mr. George H. Wolcott, representing Patten Bros. of Chicago, is in possession of the most unique specimen of a "down-east Yank" ever captured in this city. He is a jewel in the office and a sensation on the floor of the Exchange. Mr. Wolcott purchased a line of corn from a seller here when it was down among the fifties and sold some of it as high as 83c. Ever since the last car was delivered the first seller has been pushing Frank Eames, which is the name of Wolcott's clerk, for the output of one of these cars which had been sold down in the country. Frank, for reasons best known to himself, had a plausible pretext for not giving the weights, but finally a settlement was demanded. Several days elapsed, when one morning Frank appeared at the office of his tormenter in great perturbation, with the startling intelligence that "the man was dead." "What man?" asked the head clerk. "Why, the man with the output of that car of corn—was walking along the track—engine came along—ground him into mince meat—certificate of freight in his pocket—all buried together." There was a tear on Frank's cheek as he walked out of the office followed by the roars of laughter from all inside.

The Buffalo Maccaroni and Vermicelli Works, of which Mr. Louis Onetto and Pietro Terrile are the proprietors, are using 18 bbls. of flour per day in the manufacture of these goods. Most of the flour is made for them by the Urban Mills, and as the trade is increasing daily, new machinery will be put in by the Urban for the special grades of flour desired by the Italian firm. Orders were received last week for as high as 4,000 boxes and 100 bbls. of the different kinds of maccaroni from one firm, and it is claimed that the superior quality made is fast driving out the imported article.

The local wheat market has been dull, in fact dead, for three weeks. Millers bought fairly liberal of cargoes to arrive and c. i. f., and at the unsettled stage of the trade are not anxious to take on more than will supply immediate wants.

Mr. J. B. Mongin, of the milling firm of Sweet, Mongin & Co., Waterloo, was on 'Change last week.

John C. Allen and his "wicked" partner, G. L. Pratt, bucket-shop keepers and swindlers, are in trouble here.

The Grand Jury, on June 10th, found a true bill against them, charging them with offenses against the gambling laws. This is the first attempt in Buffalo to break up the bucket-shops, and from the evidence produced it will go hard with these rogues. The case was brought against them by a few country dupes.

There is little need of denying the report from Minneapolis that 2,000,000 bushels of bin-burnt wheat was shipped to this market for sale. Millers know better.

I see by the only reliable daily market paper published in Buffalo that Alexander Mann, representing John B. A. Kern & Son's Eagle Flouring Mills, Milwaukee, Wisconsin, has sent some valuable "pointers" on the coming crops. Alex. should get a position in the Agricultural Department of Uncle Sam. His knowledge concerning wheat and other cereal crops is certainly up to the standard required by the present head of that department. He says: I desire to call your attention to the coming boom in breadstuffs. The facts I give are based on some reliable information obtained in my travels, from government crop scouts, at a large expenditure for which I have placed on my expense account "oil for knowledge."

1st. The wheat crop of Greenland is almost a total failure.

2d. The corn crop of Labrador and Iceland is ditto.

3d. The reserves in Finland and Kamschatka are at the lowest point known in years.

4th. It is about time for the ten-dollar-a-barrel miller in the Northwest to issue another manifesto.

5th. Buffalo traders are advising Buffalo millers to buy wheat—always a sure "copper."

6th. Last night was New Moon and a liver and milk-colored dog howled all night in the backyard of old Hutch's boarding house.

Take notice my friends and govern yourselves accordingly. A word to the wise is sufficient. BUFFALO.

BUFFALO, N. Y., June 13, 1891.

OUR ST. LOUIS LETTER.

Harvesting in the South—Telegraph Wires Replaced—Millers' Pic-nic—Merchants Exchange Notes—Receipts, Shipments, Prices, etc.

ST. LOUIS milling news is very scarce this month and the topics for a letter are hardly as interesting as they might be. Harvest season has just set in in Southern Illinois and Kansas and the reports of the crops are excellent. On June 13th all the Southern Illinois farmers set to work harvesting and during the present week Kansas and Missouri will be hard at work. Not only the government and state reports but also private intelligence, all speak of the wheat as far exceeding any year in its quantity. The last few days of rain, both here and in Illinois were hard on the wheat and damaged it somewhat but it was in a small section of country.

At the last meeting of the Board of Directors of the Merchants' Exchange it was decided to allow all the telegraph companies to replace their wires on the Exchange floor. This action was taken on a communication received from the Western Union asking for the privilege, and was the direct outcome of a very serious accident happening some time ago to the messenger boys employed on 'Change by the company. When the wires were ruled off the floor some time ago, the telegraph people placed their private wires right outside the entrance to the floor. This necessitated the boys running into the Exchange,

an action not at all pleasant to the members. Lately two boys in trying to expedite matters by running very fast with their telegrams, ran into each other. Both were knocked senseless and one was very seriously injured. On a protest from the prominent men of the Exchange the company will again place its wires on the floor. This action will bring about \$1800 into the treasury of the Exchange yearly.

On June 4th the millers held their annual picnic down the river. About 2,100 people attended and enjoyed a very pleasant day. The trip down the river brought the party to Montesano Springs, where are spacious picnic grounds. About four o'clock the trip back was commenced, the party arriving at St. Louis at eleven o'clock, tired but not regretting at all the day's trip.

The Exchange took two holidays this month, one on Decoration Day and a half holiday to attend the laying of the corner stone of the new city hall. Just now the spring race meet is going on and attracting as many flour men as the wheat market.

As usual the vote on 'Change to expend the surplus fund on a new home resulted in a victory for the kickers. The vote was very small being only about 1,300 votes in all, but the three-fourths necessary to carry it were not obtained and the money will remain still in Government bonds. It is expected soon however, to hold another vote when it is confidently expected that it will pass.

Freight rate cutting is going on and rates to the East are much better than before.

WHEAT.

Receipts this week, June 13, were 71,329 bush., as against 106,359 bush. last week. Shipments, 38,542 bush., as compared with 98,510 bush. last week. Stocks also have fallen being only 105,046 bush., as against 181,462 bush. the week previous. Withdrawals for export amounted to 27,000 bush., with 30,589 bush. for city consumption and 45,524 bush. for rail shipment. Markets on all grades were well up and maintained good prices all week, closing as follows: No. 3 Red, 94c, No. 2 Hard (Kansas) 91½c, No. 2 Colorado, 94c, No. 2 Red, 98½c.

FLOUR.

Receipts were 21,754 bbls., and 25,491 bbls. last week. Shipments amounted to only 46,198 bbls., as against 48,871 bbls. the week previous. During the past week the market has been very dull and sales were very slight, being only to supply Southern and local orders. Extra fancy sold better than all the other grades, prices were entirely too high for buyers and while there were good offerings the millers would not accept same at high quotations. Present quotations are: XXX \$3.40 @ \$3.50; family, \$3.70 @ \$3.80; choice, \$4.00 @ \$4.20; fancy, \$4.40 @ \$4.50; extra fancy, \$4.65 @ \$4.75; patents, \$4.85 @ \$5.00.

WALTER HOWARD BAIN.

St. Louis, June 15, 1891.

MILWAUKEE REVIEW.

THE breadstuffs market are somewhat weak and declining owing to a demoralized feeling in European markets and fine weather on both sides of the Atlantic. A brisk export demand exists, however, and the movement from the seaboard is fairly large. The export clearances of wheat from both coasts of the United States for the week

ending on the 13th inst., were 2,190,000 bushels, against 2,699,000 bushels the previous week. Since July 1, 1890, the exports aggregate 94,477,000 bushels, against 102,000,00 bushels in 1890.

The following table shows the closing prices of wheat and coarse grain on 'Change, June 13, as compared with those of the same day of 1890:

	1891	1890
No. 1 Northern, o. t.	1.00	.91
No. 2 s. wht. o. t. ....	.95½	.85
No. 2 do. i. s. ....	.94½	.84½
No. 2 barley, i. s. ....	.72	.48¾
No. 1 rye, i. s. ....	.82	.46
No. 3 corn, o. t. ....	.57	.34
No. 2 w oats, o. t. ....	.43	.29¼

The stock of wheat here on the 13th inst., was reported at 155,834 bushels against 144,304 bushels the previous week, and 728,823 bushels the corresponding day last year. The receipts of grain for the 24 hours ending 13th inst. were: Wheat, 36,580 bush.; Corn, 1,300 bush.; Oats, 22,000 bush.; Barley, 2,800 bush.; Rye, 3,480 bush. Shipments: Wheat, 6,914 bush.; Oats, 41,000 bush.; Barley, 700 bush.; Rye, 2,580 bush. The receipts and shipments for the week ending same time were:

	Receipts	Shipments.
Wheat, bushels.....	155,066	40,375
Corn, "	11,160	600
Oats, "	76,000	43,400
Barley, "	32,900	5,500
Rye, "	13,993	4,320

Rail freights are quoted on the basis of 25 cents per 100 pounds for flour and grain to New York. Lake transit rates are on the basis of 23 cents per 100 pounds on flour and feed to New York. Lake and rail rates are quoted 5 cents below all rail, or on the basis of 20 cents per 100 pounds to New York. There is barely any inquiry for vessel room and freights are inactive and nominal, the rate to Buffalo being quoted at 1 cent for wheat.

The average daily flour production for past three weeks were as follows: Week ending May 30, 3,675 barrels; June 6, 3,750 barrels; June 13, 5,140 barrels. Flour is quiet and easy, the demand being light. Following are the latest quotations: No. 2 hard spring wheat patents, in bbls., \$5.20 @ 5.40; soft spring wheat patents, in bbls., \$5.00 @ 5.20; No. 3 wheat in sacks, \$4.50 @ 4.75; clears, choice bakers', \$4.20 @ 4.40; No. 3 wheat, \$4.10 @ 4.30; straight, choice bakers', \$4.80 @ 5.00; No. 3 do, \$4.40 @ 4.65; low grades, \$3.00 @ 3.75; winter straights, in bbls., \$4.65 @ 4.85; rye flour, in sacks, \$4.25 @ 4.50; in bbls., \$4.45 @ 5.00.

Millstuffs are higher. Prices range as follows: \$14.25 @ 14.50 for sacked bran, and \$17.75 @ 18.00 for fine middlings; corn-meal, coarse, in bulk, \$22.25 @ 23.50; ground feed, oats and corn, \$19.75 @ 20.50.

The receipts and shipments of flour for the week ending with the 13th inst., as compared with those of corresponding date in 1890 were as follows:

Receipts.		Shipments.	
1891.	1890.	1891.	1890.
24,582	17,067	46,527	32,975

Private advices say rain is needed in Western Wisconsin and Eastern Minnesota. In the vicinity of Kilbourn City, Wis., there is a district where moisture is needed very badly, as the crops are burning up and a general failure is threatened.

The latest quotations in cooperage are as follows: Flour barrel hoop poles, per 1,000, Western, \$11.00 @ 12.00; tierce hoops, oak, \$12.00 @ 12.50; flour barrel, hand-shaved hickory, \$7.00;

ash, \$5.50; patent hoops, \$7.00; flour barrels are quoted at 36c for round hoops. Barrel stock, No. 1 elm slack, per 1,000, \$6.50; oak, \$7.50; flour barrel headings, 4½c per set; head linings, 12-inch elm, 35c; do, 18-inch, 45c.

In milling circles generally the "mid-summer round up" or clean up is on. Most mills are shut down or running short. The output has been light and even that has not been readily disposed of at prices that paid for milling. There are exceptions; a few mill managers acting on their convictions that the price of wheat would gradually go down, have kept sold ahead and when the time for delivery came around, found they could buy and fill their orders at a profit, but not all millers have the nerve to do that, for that is speculating. The majority of millers figuring on the price of wheat when the order came found that there was no margin of profit left to them. Sales have been slow and unsatisfactory, this is especially true of patents.

In the face of large receipts at the primaries and a generally conceded great promise of the growing crop, people feel perfectly secure on the subject of future supplies and consequently buy from hand to mouth only. Thus it comes about that millers complain of dull market and small sales, but taking the crop year as a whole it has been fairly remunerative to the milling fraternity.

The number of mills idle has materially reduced the offerings of bran and middlings, and the sharp decline in corn and oats has brought these feed products into more general use again. Plenty of export orders could be got but they are at figures that most mills do not care to take. The fact is, foreign dealers have become so familiar with the cost of flour production in this country that they can take their morning cable of the Chicago market and figure to a penny just what it will cost the American miller to lay his products down in London, and they will not bid above that figure until grim necessity compels them to, or the turn of the political wheel or weather cock, gives some shrewd ones an idea that there was "money in it." The amount of wheat in sight to-day is 15,500,000 bushels, and the amount afloat to the United Kingdom, 21,600,000 bushels. Total on land and sea, 37,100,000 bushels. While our present supplies are being augmented at the rate of over a million per week, the drafts on it for milling and export are such that the net decrease weekly amounts to fully one million. At this rate we have about three months supplies, but that will carry us nicely into the next crop.

Everybody has been astonished at the great daily receipts, 276,000 bushels to-day for example, whereas it was believed that the surplus of sound grain was completely used up in July last year. Indeed, the writer has often asserted this to be a fact, but we hear from good authority to-day that Minnesota farmers are now marketing wheat of the crop of 1888.

The price of July wheat at New York was from \$1.04 to \$1.05; at Duluth for hard wheat, \$1.04 to \$1.05; St. Louis for red winter, 90c; here for No. 2 spring, 93½c; Chicago, No. 2 spring, 94c.

The prices obtained for flour depends a good deal on the desire to sell. Buyers are able generally to make their own prices. Stocks in dealers hands are light.

According to an article by Davis in the Canadian Miller, this country will be an importer of breadstuffs within the next four years. The article is well written and should be carefully read and weighed by all who are interested in our food supply. I cannot agree with him that the available wheat land in this country cannot be greatly increased. To my mind, when the time comes, that the people of this country will have to import wheat, it will simply mean an era of agricultural prosperity, and our farmers will demonstrate that the present acreage in wheat can be nearly doubled, and that too without encroaching on or rather diminishing other crops. Nevertheless the article is timely and interesting in view of the very rapid increase of our population.

* * *

L. R. Hurd, of the Daisy Mill, reports orders ahead to keep the mill running full time until Aug. 15; having turned out since July 1, 1890, 330,000 bbls. of flour, not a barrel of which has left the mill until sold. Also that on the 15th of Aug. prox.—nothing in the mean time preventing—the mill will on that day have made a year's continuous run of 24 hours per day.

DONALDSON.

MILWAUKEE, June 15, 1891.

MILWAUKEE NOTES.

Supervising Architect Edbrooke, of Washington, D. C., will visit this city in a few days for the purpose of making a personal examination of the federal building site and its surroundings.

May 20th a large delegation from the City Council of Boston made Milwaukee a visit. They were royally entertained and shown such public works and private manufacturing institutions as they desired to inspect. They visited the Edw. P. Allis works and were surprised at the magnitude and evident prosperity of that institution. The Pabst Brewery was also visited and the Bostonians were shown how Milwaukee beer is made and they showed no conscientious scruples about sampling the manufactured article either.

Mr. E. Donaldson, for many years a commission merchant and flour broker in this city, and whose name is familiar to readers of *Milwaukee Reviews* in our columns, has accepted a position with a leading flour milling firm of Michigan. He will travel through some of the Eastern states in the interests of the firm, where we trust he will succeed to an extent that the capacity of the plant represented will be fully taxed.

The Wisconsin Free Malting Company incorporated June 9, with a capital stock of \$200,000. The incorporators are Charles Allis, Edwin Reynolds and John W. Free. Mr. Free has been connected for years with the malting business, and holds the title to some of the most valuable patents on malting machinery in the country. Mr. Allis is a son of the late Edward P. Allis and Mr. Reynolds is a member of the firm of E. P. Allis & Co. The corporation is formed for the purpose of entering extensively into the malting business in this city, and the plant, which it is proposed, shall be one of the largest in the country, will be located near the present E. P. Allis works on the South Side. With the aid of the improved machinery the new plant will be also the most perfect in the country.

NEW S.—THE Little Falls roller mill at Little Falls, Minn., was destroyed by fire, June 3. The fire is supposed to have originated by the explosion of a lamp in the basement. Only a small part of the mill was left standing. Loss \$65,000; insurance, \$47,500. The building was completed and began operations in the fall of 1887, and had a capacity of about 350 barrels daily. It will be rebuilt, but nothing definite can be said until a meeting of the stockholders has been held.

THE N. Knauf Co. succeed Zech Bros., millers at Chilton, Wis.

AT Uniontown, Ala., June 6, B. Howard's grist mill was burned. Loss, \$2,500.

BARKMAN & THIELE, millers at Marcus, Iowa, are succeeded by Barkman & Martin.

AT Bloomfield, Ont., May 13, A. B. Saylor's flour mills were burned. Loss, \$4,000; insurance small.

AT Mapleton, Pa., May 11, the flour mill of J. K. Robley was burned. Loss, \$11,000; insurance, \$7,000.

AT Eagle Mill, Tex., June 3, the milling plant of Hicks Bros. & Lassiter was burned. Loss, \$15,000; no insurance.

AT Uhrichsville, Ohio, June 6, fire totally destroyed the flouring mill of T. B. Smith. Loss, \$15,000; insurance \$10,000.

AT Oshkosh, Wis., May 26, fire in the barns owned by the Foote Bros.' Milling Company did \$6,000 damage; insurance, \$3,000.

AT Chico, Cal., May 19, the Durham Flouring Mills were burned, William M. Taylor, proprietor. Loss \$5,000; insurance \$2,700.

HON. JOHN MCKENZIE, mill owner at Deorra, Wis., died May 6, aged 59 years. He had been in the milling business since 1868.

THE London, Eng., Flour Trade Association gave a banquet in honor of the visiting American millers on the evening of May 30.

It is reported that work will shortly commence on a 100 barrel roller mill at Fairfield, Wash. C. H. Potter and James McKay are the projectors.

AT McGregor, Ont., May 28, Higgins Bros.' grist and saw-mill outbuildings were burned with some lumber and flour. Loss, \$20,000; insurance, \$6,000.

VAN SLYKE & ADAMS' flouring mill at Leslie, Mich., was recently burned. Loss \$7,000 with slight insurance. The cause is believed to have been incendiary.

C. W. WASHBURN, of Junction City, Ore., and his son, B. A. Washburn, of Springfield, Ore., have let a contract for the machinery for a 150-barrel roller mill at the latter-named place.

AT Buffalo, Minn., May 31, the large elevator and grist mill, owned by Thomas Hillier, were burned. Loss \$12,000. The supposition is that the mill was struck by lightning.

AT Albany, Ga., May 24, the Stresian flouring mill and elevator were burned, together with six freight cars loaded with flour, corn and bran. Loss, \$15,000 to \$20,000; fully insured.

MR. YATES ASHLEY, miller, of Pardeeville, Wis., made us a pleasant call on the 9th inst. He said business was good, particularly custom trade. Mr. Ashley was on his way East on business.

AT Alexandria, Minn., May 15, fire broke out in the old Pillsbury elevator and partially destroyed it. The main building was saved, but in damaged condition. The engine house and contents are a total loss.

IN the list of shipments by The Jonathan Mills Manuf'g Co., published in our last issue, the item of Purifiers to the Kratochwill Milling Co., should read instead, to James Kratochwill, Carrollton, O., which is near Dayton.

ARMSTRONG & CO.'s elevator at Lincoln, Ill., containing 4,000 bushels of oats and corn, and a lot of cribs adjoining, in which were 40,000 bushels of corn, were burned May 20, entailing an aggregate loss of \$38,000, with no insurance.

THE injunction suit of Fred. O. Crary, of Hudson, Wis., to prevent the formation of the Northwestern Consolidated Milling Company, of Minneapolis, Minn., was compromised on the 11th inst. The combination paid him \$2,500 for his \$5,000 of stock.

AT Lorena, Texas, May 21, the grain warehouse and steam corn sheller, together with a large lot of grain and feed, the property of Henry C. Schaffer, was burned. Nothing was saved except the engine and boiler. It was insured in local agencies for \$1,350. Loss \$6,000.

THE result of the investigation of the experts in regard to the alleged wheat stealing is that everything connected with the handling of wheat at Duluth is perfectly straight and regular, and that no wheat was shipped or has been shipped out of Duluth without the knowledge of either the weighing or inspection departments.

MR. THOMAS HILLIER, of Buffalo, Minn., whose mill and elevator were burned May 31, had \$7,500 insurance on same; \$2,500 in the Western Millers' Mutual, of Minneapolis, and \$5,000 in the Millers' National, of Chicago. His loss over and above insurance was between \$4,000 and \$5,000.

THE failure of Charles Haight & Co. of New York will in no way complicate or embarrass the Freeman Milling company of Superior. A. A. Freeman has satisfied the Superior stockholders of that. His individual relations with this company are in fact improved as a result of the failure.

A MAN at Pardeeville, Wis., drove into a mill pond with a load of flour to wet his wheels. The bank there is quite steep and before he could prevent it the whole outfit was afloat. The wagon went to the bottom but the man, team and wagon box got out, very much wet and the man very mad.

INCORPORATION papers were filed at Columbus, O., June 1, for the Consolidated Oatmeal Company, with a capital stock of \$3,500,000. All the oatmeal mills of the country are thus brought under one management and headquarters will be at Akron, O. The incorporators say prices will probably be lowered.

THE liabilities of Chas. Haight & Co. flour commission merchants at No. 24 State street, New York, are reported to be about \$300,000 and nominal assets considerably larger. The assignment was due to legitimate business causes, and speculations in wheat had nothing to do with it, as the firm had not speculated at all.

ARTICLES of incorporation have been filed at Athena, Ore., by the Athena Flouring Mill Company, the objects of which are to build and operate a 100-barrel flour mill at Athena. Capital stock, \$13,000, divided into shares of \$50 each. The incorporators are T. J. Kirk, L. D. Lively, C. W. Hollis, C. A. Barrett, E. L. Barnett and J. H. Hiteman, all of Athena.

PORTER & MCKAY, of Spokane, Wash., have contracted to build a flouring mill at Garfield, Wash. The contract stipulates that work on the construction shall begin not later than June 15, and that the mill shall be fully completed and in operation by November 1, 1891. The mill is to be of not less than 50 barrels per day capacity, and the building suitable for a hundred or hundred and fifty barrel mill will be built.

AT New York city, on the morning of June 1, fire started in the four-story building of the Brooklyn Cooperage Company, occupying an entire block. The fire extended to the bagging factory, also covering a block, and to the tenements in the rear of the bagging factory. There was a large amount of machinery in the bagging factory which was destroyed by the fire and water. The loss will amount to \$420,000.

AT Centerville, Mo., May 31, the grain elevator and agricultural implement house of Porter & Delany was burned. The contents of the building included 6,000 bushels of corn, 500 bushels of wheat, several hundred bushels of oats, a quantity of baled hay and a lot of agricultural implements, including seventeen wagons. There was no insurance except \$200 on building. The fire is supposed to have been started by tramps.

IN November, 1887, while employees of the Standard Oil Company were unloading a car of oil at Fort Worth, Kans., the tank broke open and the escaping oil ran into the engine room of the Goodlander Mill Co., caught fire and destroyed the entire plant. The mill company claims the accident was caused by a defective oil tank, and on May 15, 1891, filed a declaration in the United States Court against the oil company for \$200,000 damages.

THE Capital Mills, located at Salem, Ore., were transferred May 25, from Robert Livingstone to the Portland Flouring Mills Company. It is reported that the same will be transferred to the Willamette Valley Milling Co., whose stockholders are Theo. B. Wilcox, Charles E. Ladd and A. N. Bush. The mill will be thoroughly overhauled, and plans are now being made to commence operations this fall. The mill has a capacity of 600 bbls.

THE Minnesota Fire association and the Millers' and Manufacturers' Mutual Fire Insurance association have consolidated under the name of the Millers' and Manufacturers' Insurance company. The total capital is now given at \$421,601 and the total liabilities at \$71,364. The officers remain the same as of the Millers' company. The object of the union is to secure to the Millers' company the charter possessed by the fire association.

ARTICLES of incorporation of the Freeman Milling Company, of Superior, Wis., capital \$250,000, were filed June 9, at Madison with the secretary of state. The new mill will be built this season and situated on the east side of Hughitt slip, where it will occupy a

side which fronts 900 feet on the slip and 300 feet on Howard's bay and is valued at \$75,000. The mill structure itself will be 114x80 feet in size, of brick and stone, and 6 stories in height. In addition to this will be constructed a separate building for a power house and a grain elevator of one hundred and forty thousand bushels capacity for the exclusive handling of mill wheat. The mill is designed to have a capacity of twenty-five hundred barrels of flour daily, and when complete and ready to run will probably represent a cash outlay of \$175,000.

WHEN J. C. Stout failed to come to time with the \$86,000 bond necessary for an appeal in the injunction suit against the Sidle, Fletcher, Holmes Co., of Minneapolis, the next step was a compromise between the warring factions. It has been known that this move on the part of Stout, as well as that of Crary, was simply to dispose of their stock, and they, through their attorneys, formally accepted an offer of 50 cents on the dollar for their stock. A stipulation for the dismissal, signed by both parties, was filed in the United States court, June 11. Another evidence of the removal of all obstacles in the way of the proposed consolidated company was seen by the filing in the register of deeds' office on 11th inst. of a deed of the Sidle-Fletcher-Holmes company's millsite property. The consideration named was \$425,000.

ALFRED A. FREEMAN, Henry Koper and E. C. Haight, composing the firm of Charles Haight & Co., flour commission merchants, at No. 23 State street, New York, made an assignment on June 9, without preference, to Parker P. Simmons. Mr. Freeman was also a partner in the firm of A. A. Freeman & Co., of La Crosse, Wis., and of Freeman & Ruyter, River Falls, Wis., both large flour mills. The firm claimed a capital of \$400,000, have always stood very high in credit and had the confidence of the trade. The sheriff served an attachment on the 9th inst. against Robert Gregg & Co., millers, of Cannon Falls, Minn., obtained by the Chemical National Bank, of New York, for \$6,300, on drafts dated Jan. 30. It was supposed that Haight & Co. had flour belonging to Gregg & Co. in their stores. The flour mill of A. A. Freeman & Co., at La Crosse, Wis., was burned in August, 1890, and all his known property in Wisconsin, at present, is his interest in the Freeman & Ruyter mill at River Falls.

MILLING AND MECHANICAL NOTES.

WHEN selecting pulleys and belts don't be afraid of having the face of the pulley or belt too wide. Economy will be found in the use of wide belts, if not carried to extremes.

If the grate surface under a boiler is larger than is necessary to burn the required amount of coal, it is neither economy, convenience nor good judgment to retain the full surface, as better results with less labor and more economy in fuel, would be obtained by shortening the grates to such an extent that from eight inches to twelve inches of fire would be required at all times.

DON'T FORCE YOUR BOILER.—One very important cause of deterioration in boilers is due to the fact of their becoming too small to do the work without forcing, so that the pulsations of the engine cause a well marked succession of shocks on the boiler, which result in the weakening of the material. By placing one's hand on the head or shell of the boiler, the vibrations of the metal can be felt similar to the rising and falling of a man's chest while breathing.

TO CLEAN MACHINERY.—A useful recipe for a mixture to clean the iron portions of machinery and ordinary tools is as follows: Take two to three cents' worth of paraffine, chipped fine, added to one litre of petroleum in a stoppered bottle, which for two or three days should from time to time be shaken up until the paraffine is dissolved. To apply it, the mixture is well shaken, spread upon the metal to be cleaned by means of a woolen rag or brush, and on the following day rubbed off with a dry woolen rag.

CEMENTING IRON GRATING, ETC.—The following mixture has been used with great success for the cementing of iron

railing tops, iron gratings to stoves, etc., with such effect as to resist the blows of a sledge hammer. This mixture is composed of equal parts of sulphur and white lead, with about one-sixth proportion of borax, the three being thoroughly incorporated together, so as to form one homogeneous mass. When the application is to be made of this composition, it is wet with strong sulphuric acid, and a thin layer of it is placed between the two pieces of iron, these being at once pressed together. In five days it will be perfectly dry, all traces of the cement having vanished, and the work having every appearance of welding.

BANKING FIRES.—The fire in a boiler was banked over night, and during one evening a considerable portion of the water leaked out. In the morning the fireman stirred up his fire and then noticed that there was no water in sight, and considerably frightened, he drew the fires and waited for the engineer, not daring to put in water. The engineer did not get excited, but took a piece of waste, wet it well, put it on the end of a poker and rubbed it over the boiler plates and appeared satisfied. "What do you do that for?" inquired the fireman, and from the engineer's reply he gathered that if the plates were overheated, the water left by the wet piece of waste would show it by quickly evaporating, but if they were not overheated the water would remain on the plates. From this little test he satisfied himself that it was safe enough to fill up the boiler.

CYCLONE FLOUR.—The other day we called upon the millers of this flour and saw the system at work. It is a system of producing flour from wheat by pulverisation instead of either grinding by stones or rollers. By means of a cyclonic current circulating in an hermetically sealed chamber, the wheat is dashed against spikes and against itself until it is pulverised into particles of various degrees of size. So far there is little difference between the old system of milling and this. It is in the dressing that the difference begins. It is true under the old system of milling heat is evolved, whereas under this it is kept cool by being freely aerated. Dressing in the old system is done by sieves or silks, where the particles are graded by size only. In this system they are graded by weight, specific gravity being the grading power. After the wheat is pulverised, it is driven by a blast of air and separated into six different grades. The heaviest particles fall into the first compartment, the next heaviest into the second, the next heaviest into the third, and so on to the sixth. The result of this is that the old proportions of bran, gluten, starch, etc., are altered. This may be an advantage, or it may be a disadvantage. We are not yet prepared to say which. We hear from pretty good authority that cyclone meal and flour is finding a ready sale. —British & Foreign Confectioner, London.

The Wadhams Oil & Grease Co., of Milwaukee, Wis., and Seattle, Wash., advise us of the receipt of the following letter, in reference to their "World's Fair Metal Pomade". They are sending on application, free of charge, a small sample of same.

MILWAUKEE, WIS., March 17th, 1891. }
Office of the C. M. & St. P. Ry. }

J. A. WHALING, Gen'l Storekeeper.
Dear Sir:—Replying to yours of the 19th in regard to World's Fair Metal Pomade, I have given this a fair trial, and find it is full as good if not better than any Pomade we have ever used for cleaning brass work. I think it would be advisable for us to use the World's Fair Pomade hereafter in preference to all others. Yours truly,

W. O. DAVIS, Gen'l Foreman.

INDUSTRIAL TRAINING.

COLONEL WRIGHT, the Commissioner of Labor, has nearly perfected plans for an inquiry through his department regarding the results of industrial and manual training in industrial institutes and trade schools. When the subject of the work of these schools was first suggested, it was generally supposed that the inquiry would be mainly of a statistical character. Colonel Wright, however, came to the conclusion that such an inquiry would add little to the information which is already gathered by the Bureau of Education and by the Census Bureau, and that much more profitable work could be done in studying the results and the benefits of the employment of the graduates of the trade schools. It will be somewhat difficult to confine the answers to such inquiries within statistical limits, but an approximation can doubtless be made towards the aggregate benefits of the system of special training for manual employments. The inquiry will relate mainly to the schools of general manual training, and to those giving expert training in special lines of mechanical and scientific business. The schools of design will also be reported upon, although they are not considered strictly a branch of manual training.

Among the questions which will be considered in the proposed inquiry are the proportion of graduates of training and trade schools who obtain positions in mills and factories, their degree of superiority over workmen without such training, the rapidity of their advancement in comparison with those without training, their advantage in salary, and the benefits resulting to the establishment by the skill and training of such graduates. Colonel Wright obtained the suggestions of prominent manufacturers and students of education regarding his inquiries, and has prepared a series of questions to be put to the graduates of training schools. Among the questions asked are the economy shown by graduates in the use of materials, their faculty for managing men, their facility in handling tools, and whether in employing new help the employer gives the preference to graduates of the schools. No wide inquiry of precisely this nature has ever been made, although certain features of it have been touched upon by investigations under the State Boards of Massachusetts and Pennsylvania, and by a recent commission authorized by the British Parliament. All of these inquiries, however, dealt more with the bare statistics than with the economic results of special training.

Colonel Wright will rely upon both correspondence and the work of special agents to get at the facts he desires. The inquiry will be prosecuted in Europe as well as in this country, and the success of the modern technical schools there compared with our own. Trace of the graduates of these schools in both countries is usually kept by the officers, who will gladly exert themselves to furnish the Department of Labor with the names of as many as possible of their graduates who have found places in mills and factories. A circular letter will then be sent to the employer of each of these graduates, embodying such questions as those just referred to. If prompt answers are not obtained by mail, special agents of the Department will visit the factories and seek the information verbally. There can hardly be any objection by a manufacturer or mill owner to furnish-

ing the information sought, and as it will be of considerable value to such employers, it is expected that they will gladly furnish it. It will probably take eight months or a year to get all the data desired, and the results will be then embodied in a special report to Congress.—*Commercial Bulletin*, New York.

EX-GOVERNOR LUDINGTON OF WISCONSIN DEAD.

EX-GOVERNOR HARRISON LUDINGTON of this city, died June 17. He was born July, 30, 1812, at Ludingtonville, Putnam County, N. Y. After acquiring an education, such as was afforded at the common schools of his native village, he decided to make an effort in his own behalf in the more extended fields of the then far West, and together, with his uncle, Louis Ludington, began his business career in Milwaukee in November, 1838, as the successor of Solomon Juneau, Milwaukee's first white settler. In 1851, after thirteen years of success, he withdrew from merchandising to embark in the manufacture of lumber, and for forty years he was one of the most prominent and successful lumbermen of the Northwest. He was elected alderman in 1861 and re-elected in 1862. He was mayor in 1871; was re-elected in 1873 and held the office until January, 1876, when he resigned to assume the duties of governor of the state, to which office he was elected in November, 1875.

Several strong elements in his disposition contributed to Mr. Ludington's prosperity. Among them were both personal and moral courage, energy and integrity, honesty and firmness, good judgment and willingness to conform to business methods and wholly avoid speculation.

Mr. Ludington brought the first seed wheat from the East to Milwaukee, and bought the first load of grain brought to this market. Old settlers speak of him as the first "elevator," because he carried this grain on his back into an upper story of his warehouse, where he stored it.

His physical decline dates back to 1885, when he slipped on an icy sidewalk and injured his leg, from which he never fully recovered. The injury prevented him walking to his office, and getting his customary exercise, the failure to get which began to tell on his general health at once. On June 8, last, he suffered a partial stroke of paralysis, and this, acting upon a system that was run down and worn out by the experiences of a long life, culminated in his death.

During his business career of fifty-three years his credit has been unimpaired, and war, panics and the various commercial revulsions of this long term failed to prevent his meeting every obligation fully and promptly.

EXPORT FOR MAY.

The Chief of Bureau of Statistics reports the following statement of the exports of domestic breadstuffs for the month of May, 1891: Barley, 196,476 bush.; Corn, 853,876 bush.; Cornmeal, 17,118 barrels; Oats, 17,636 bush.; Oatmeal, 321,708 pounds; Wheat, 6,286,987 bush.; Wheat flour, 799,497 barrels. Total value of breadstuffs exported for the month, \$12,330,231; same month, 1890, \$13,684,733. Total value of breadstuffs exported for the 11 months, ending May 31, 1891, \$109,956,984; same period, 1890, \$139,855,022. These statements include 98 per cent. of entire exports of the articles named from all ports of the country.

A MILWAUKEE PLANT.

GOING through the immense plant of the Edward P. Allis Company, with its endless machines and hundreds of workmen, one would think there was not work enough in the world to keep it going, but it finds more work than it can do and is rushed day and night. The advent of electricity as a motive power has added greatly to its work and it has orders ahead for any number of engines for electric purposes. The Allis people estimate that 40 per cent. of all the engines they build now, drive electric generators. A 350 horse-power engine every day. That is the present capacity of the Allis works. It is safe to say that there are few machine shops in the world with anything like such a capacity.

JUNE CROP REPORT.

THE June report of the statistician of the Department of Agriculture, makes the area in winter wheat as compared with the breadth harvested last year 111.5; spring wheat 103.4; barley 107.1; rye 101.5; oats 97.9. Condition: Winter wheat 96.6; spring wheat 92.6; barley 90.3; rye 95.4; oats 85. In comparison with 1889 the increase in wheat acreage is quite moderate. The reduction last year of more than 2,000,000 acres suggests the reason for most of the present increase. This advance is therefore both replacement and development, the former notably in Illinois, Missouri, Kansas and California, the latter in less degree in Washington, Oregon, the Dakotas and in several territories. The condition of winter wheat has declined one point. The average of New York 96; Pennsylvania 97; Georgia 98; Texas 98; Ohio 99; Michigan 90; Indiana 99; Illinois 98; Missouri 99; Kansas 95; California 97. The first monthly statement of averages of spring wheat makes Wisconsin 77; Minnesota 89; Iowa 95; Nebraska 97; the Dakotas 96. Early sown wheat was injured by frost in Wisconsin and Minnesota. Germination was arrested by drouth in the same region. In South Dakota drouth has retarded growth. Conditions have been more favorable in North Dakota. Recent rains in Iowa and Nebraska have greatly benefited wheat and encouraged the growers.

TRADE NOTES.

NEEDHAM BROS., Ishpeming, Mich., M. B. Wells & Co., Waupun, Wis., O. Paulson, Clearmont, Iowa., W. L. & O. Churchill, Alpena, Mich., R. D. Pike, Bayfield, Wis., D. J. Murray, Mfg. Co., Wausaw, Wis., have placed their orders with Menasha Wood Split Pulley Co., of Menasha, Wis., for Hickory Pulleys. The price of the Standard small Pulleys made by the Menasha Wood Split Pulley Co., has been reduced about one-half.

MAY 18.—The Jonathan Mills Mfg. Co. of Columbus, O., have just shipped Purifiers to the following parties: Miles & Son, Frankfort, Ky.; a repeated order for two double machines to Acme Milling Co., Indianapolis, Ind.; 2 single machines to W. L. Kidder & Son, Terre Haute, Ind.; a repeated order for 3 machines to Goshen Milling Co., Goshen, Ind.; John Clee, Detroit, Mich.; Shumacher Milling Co., Akron, O.; R. F. Harris, Charlottesville, Va.; Stillwell & Bierce Mfg. Co., Dayton, O.; Wm. H. Snyder, Dayton, O.; a repeated order to The St. Jacob Enterprise Mill Co., St. Jacob, Ill.; 2 single machines to Walton & Whisler, Atlanta, Ind.; Gardner & Seymour, Fulton, N. Y.; a repeated order for 2 machines to The F. Schu-

macher Milling Co., Akron, O.; 9 Reels to Thos. M. Holt, Haw River, N. C.; 12 Reels to Rio Milling Co., Charlottesville, Va.; 5 to S. Bennett, Redbank, N. J.; 1 to Besser & Marvin, Marshall, Ill.; 1 to W. E. Brown, Sparta, Ill.; 1 single Air-belt Scalper to Yaeger Flour Mill Co., Carlinville, Ill.; to Barry Milling Co., Barry, Ill.; R. F. Harris, Charlottesville, Va.; Wm. Rathman, Uniontown, Ky.; Reed & Carnrick, Bainbridge, N. Y. They report among work they are shipping at the present time: 3 double Air-belt Scalpers, 5 double Air-belt Purifiers, 20 26" Flour Dressers to John Dempster, Lenoir City, Tenn.

TOBACCO.

DR. SEAVER of Yale College, is waging war upon the habit of tobacco smoking, which some of the students there indulge in. He is the physician of the college and the professor of athletics, a man of science who follows scientific methods in any investigation he may undertake. He has been engaged for eight years in observing the effects of tobacco smoking upon the bodies and minds of the Yale students, and he has just published a remarkable budget of statistics.

Dr. Seaver informs the public that the students of Yale who indulge in tobacco smoking are inferior in physical vigor and mental ability to those who do not. According to his reckoning, the smokers have less lung power than the anti-smokers; they have less chest-inflating capacity; they are of less bodily weight, and they are even of less height. The muscular and nervous power of the smoking students is notably and noticeably less than that of the anti-smoking. From an athletic point of view, therefore, the Yale professor of athletics considers himself justified in waging war upon the tobacco habit.

Not only in a physical way, but also in an intellectual way, the Yale smokers are inferior to the anti-smoker. The smoking habit is disadvantageous to scholarship. Of those students who, within a given time, have received junior appointments above dissertations, only five per cent were smokers, and very few smokers received appointments of any kind. It would seem, therefore, that the brain power and the scholarship of the smokers at Yale are far inferior to the anti-smokers.

The demonstrations of Dr. Seaver appear to be influencing the Yale mind. He is able to report that seventy per cent of the senior class in the college do not smoke, that the leading athletes do not smoke, and that not a single candidate for the rowing crew is a smoker.

Young America, athletic, intellectual, and ethical, can ruminate upon the Yale statistics collected by Dr. Seaver.—*New York Sun*.

MORE NIAGARA WATER-POWER.

The *Railroad Journal* says: "The preliminary survey has been begun for a water-power canal which is to take water from the Niagara river at Tonawanda, near Buffalo, and to run thence to Lockport, where the projectors expect to utilize the power obtained from the fall. From Lockport it is to run to Olcott, where an additional fall will be obtained before the water is discharged into Lake Ontario. It is expected that some 250,000 H. P. can be obtained. The distance from Tonawanda to Lockport is about fifteen miles; from Lockport to Olcott, twelve miles."

OUR LEGAL DEPARTMENT.

Specially prepared for The United States Miller and Milling Engineer, from the latest decisions.

ENDORSEMENT OF NOTE AFTER EXECUTION.—A person, not a party to a negotiable promissory note, who places his name on the back thereof after its execution and delivery, before maturity and before it has been endorsed by the person to whom it is made payable, is, as to subsequent *bona fide* holders, an endorser of the paper.—*Buck v. Hutchins*, Supreme Court of Minnesota, 47 N. W. Rep. 808.

SUFFICIENCY OF EVIDENCE TO PROVE NEGLIGENCE.—In an action by an employe for injuries received from a belt negligently left uncovered near a machine at which he was at work, where he testifies that he was not sure whether he was caught on the belt or not, and none of his witnesses saw the accident, his case is fatally defective in that he does not show that his injuries resulted from his employer's negligence. The ground of liability is not danger, but negligence, and the test of negligence is the ordinary usage of the business.—*Ford v. Anderson*, Supreme Court of Pennsylvania, 21 At. Rep. 18.

COMPROMISE OF LITIGATION.—Where an effort is made to compromise complicated litigation growing out of a connected series of transactions, and from the whole course of the negotiations, embracing various propositions and counter-propositions, it appears that the parties intended to include all matters of difference between them, the compromise ultimately reached will be held to embrace all the claims, though one claim was not specially mentioned in the proposition that was accepted.—*Coburn v. Cedar Valley Land and Cattle Co., Limited*, Supreme Court of the United States, 11 Sup. Ct. Rep. 258.

CONTRIBUTORY NEGLIGENCE.—Where an adult had worked about a saw-mill for nearly four years, and for about a year as helper to the sawyer at an "edger," and testified that on several occasions he had run the edger himself, by direction of his employer, after telling him that he did not understand machinery; that the saws were stopped and started at will by pulling respectively, two ropes which hung near; that the morning of the accident was quite dark but there were no lights; that he had been directed to run the machinery, and while doing so a sliver had dropped upon the shaft which he attempted to remove, as he had seen the sawyer do, without stopping the saws, and while doing so his sleeve was caught by the set-screw, of whose existence he was ignorant, and his hand was cut off. There was no evidence of negligence, but he was guilty of contributory negligence.—*Ingerman v. Moore*, Supreme Court of California, 25 Pac. Rep. 275.

LIABILITY FOR NEGLIGENCE.—Plaintiff while in the employ of defendants, working on a scow which received mud from a dredging machine, was injured by the careless management of the machine by defendant's employe who controlled it. There was evidence that the negligence of such employe was caused by his intoxication; that he had been intoxicated two or three times a week for nearly two years before the accident, during which time he had been employed by defendants, although their superintendent was frequently at the dredge during that time; and that plaintiff had seen him drunk on three occasions during the eight days of plaintiff's employment, but he did not report the facts to the defendants or leave the employment

on that account. It was a question for the jury whether the plaintiff as well as defendants was charged with negligence, and a dismissal of the complaint was in error.—*Tonneson v. Ross*, Supreme Court of New York, 12 N. Y. Supp. 150.

FAILURE TO DELIVER TELEGRAPH MESSAGE.—Where a telegram is sent by a wife, about to be confined, to summon her husband, and by reason of negligent delay in delivery of 24 hours, he did not arrive, whereby the complainant alleges that she suffered more physical pain, mental anxiety and alarm on account of her condition, and sustained permanent and incurable injury for want of his presence and services, such damages are not too remote. Mental suffering caused by negligence and delay in the delivery of a telegram not of a pecuniary nature, may be ground of damages, though no physical pain or pecuniary loss is suffered. Where a telegraph office had the sign of the defendant company over the operator at that point testified that he paid over all receipts to the treasurer of said company, the office is an office of the company. The stipulation on a telegraph blank against liability for an unreported message does not protect the company where such message is negligently delayed in transmission. If such stipulation has any validity at all, it is only in case of a mistake in transmitting, and then only when the negligence is slight.—*Thompson v. Western Union Tel. Co.*, Supreme Court of North Carolina, 12 S. E. Rep. 437.

IMPLIED GRANT OF WATER RIGHTS.—The owner of certain mills had also title to a pond, from which water was carried to them through a flume. Under an agreement with other mill-owners he acquired an interest in a reservoir for the storage of water, which was allowed to flow to the pond as required. This interest was by the agreement declared appurtenant to and forever inseparable from the mills and the water privileges connected therewith, which were charged, in whosoever hands they should come, with a share of the cost in maintaining the reservoir. The owner conveyed the mills, but not the pond, the deed granting the right to draw water from the latter through a six-inch pipe as long as the pond should be continued. This deed contained the usual covenants of title, including one against incumbrances. At the same time the owner leased to the grantee for 20 years, all the water in the pond, to be used for manufacturing purposes through the flume leading to the mills, at an annual rental of one dollar, which was duly paid during the term of the lease. The water from the pond or a like quantity from other sources, was necessary to the operation of the mills. The term of the lease having expired, the grantee claimed the right to use the water from the pond and reservoir as theretofore, as an easement created by implied grant. Under the deed no rights in the waters of the pond or reservoir passed by the deed except those expressly mentioned, and at the end of the term of the lease, the grantee's rights in the waters ceased if the pond should be discontinued, and were limited to the flow through a six-inch pipe should the pond be maintained.—*Washburn & M. Mfg. Co. v. Salisbury*, Supreme Judicial Court of Massachusetts, 25 N. E. Rep. 724.

MINNEAPOLIS NOTES.

THE PILLSBURY - WASHBURN milling syndicate contemplate building a new dam at the foot of Tenth Avenue, south. The purpose is to bring water out of the east side

channel and furnish an additional head of 30 feet at that point, thus adding largely to the manufacturing possibilities at the falls. According to the preliminary estimates of the engineer, the improvements could be completed in a year. The dam will be a heavy stone structure, and all complete, it is estimated, will cost about \$800,000.

UPON stipulation of counsel for the plaintiff and defendant, a change of venue was granted June 4, from Ramsey to Hennepin county, in the injunction case of J. C. Stout against the Sidle, Fletcher, Holmes Co.

FRANCIS B. WEBSTER, aged 76 years, died suddenly on the 5th inst., at the residence of his son, Edward E. Webster, manager of the Holly flour mill.

THE Northwestern Consolidated Milling Company of Minneapolis has filed a certificate of incorporation signed by John Martin, Fred. C. Pillsbury, Chas. K. Sidle, Albert C. Loring and Ernest Zeidler, all of Minneapolis.

THE great Minneapolis mill combination was blocked by an injunction from the St. Paul District Court, restraining them from consolidating.

C. T. and J. C. Buchanan, doing business as the Shakopee Mill Company, assigned to Charles G. Hinds, on the 12th inst. Liabilities, \$37,500; nominal assets, \$60,000.

JUDGE NELSON granted to Fred O. Crary, of Hudson, Wis., a temporary injunction, restraining the Sidle-Fletcher-Holmes Company, in which he owns stock to the amount of \$5,000, from entering the milling combine. A hearing of the matter is set for June 23 in the United States Court, at St. Paul.

A LIFE-SIZE portrait of Chas. M. Loring was presented to the Chamber of Commerce on the 10th inst., by about 70 members, men in active business about the chamber. The presentation took place at the monthly meeting of the Board of Directors. Following is the letter accompanying the portrait:

To the Board of Directors of the Chamber of Commerce:

The undersigned, members of the Chamber of Commerce, desiring to show their appreciation of the great worth and eminent services of the Hon. C. M. Loring, as president and director of this institution for many years, herewith present to the organization through you, an oil painting of Mr. Loring, asking you to kindly place same in a suitable location in the directors' room of the Chamber of Commerce.

THERE is a speck of war springing up between A. G. Mosher, city sealer of weights and measures, and some of the elevator men in regard to the weighing of grain. Under the provisions of existing ordinances Mr. Mosher is compelled to exercise supervision over the scales used in weighing grain at the elevators. The state law also provides for the inspection of all scales used by the grain dealers, who foot the bills for such inspection. Owing to this conflict of jurisdiction the elevator and grain men are called upon for more inspection fees than they think should be demanded of them, and will appeal to the council on Friday evening for relief. They are perfectly willing to pay one fee for inspection either to the state or city, but regard a double dose as too much of a good thing.

THE big injunction suit of James C. Stout, against the officers of the Sidle-Fletcher-Holmes Company, that snag in the organization of the Consolidated Flour Mill Company, was before Judge Lochren on June 8. The suit was originally begun in Ramsey county, but the defendants secured a change of venue to Hennepin county.

Jas. C. Stout, a stockholder in the Sidle-Fletcher-Holmes company, owning 400 shares valued at \$50 each, is decidedly opposed to the transfer of the mill and its furnishings to the consolidated company, and prays for an injunction against the company and its officers, Fred C. Pillsbury, John Martin, Chas. T. Fox, Chas. K. Sidle, H. G. Sidle and Jas. W. Lawrence, to restrain them from making the transfer. He asserts that the mill is a paying concern and has property worth over \$400,000. The union with the Columbia, Galaxy and Petit mills he holds is undesirable and of no benefit to the stockholders. In fact he deems it an exceedingly hazardous step, from a financial point of view, to change the existing order of things. He as a stockholder has never given his consent to the consolidation but has opposed it entirely. Moreover, he asserts that the officers of the company have no authority to convey the property of the Sidle-Fletcher-Holmes company to the consolidation. The complaint and answer are both very long and are ornamented with a wealth of legal terms. The answer, in brief denies that the concern is a paying one and is worth \$400,000, and asserts that the consolidated scheme is desirable in every way, and is agreeable to all the stockholders except the plaintiff, Mr. Stout.

The case came up on a motion by the plaintiff to have the action continued, in order that he might have expert bookkeepers go over the books of the company. His claim is that the indebtedness of the corporation was caused mainly by gambling in wheat, and he wants the books for the purpose of proving it. The motion was denied.

IN the district court, June 9, James C. Stout received a set back in his injunction case against the Sidle-Fletcher-Holmes company, in which he sought to have the corporation permanently enjoined from going in on the new flouring mill consolidation scheme. After hearing all the arguments for and against the temporary injunction, issued some days previous, Judge Lochren ordered it dissolved, granting, however, a stay of 24 hours, in which time Mr. Stout may file an appeal bond in the sum of \$86,000.

THE industrious country grain dealer is working a novel scheme whereby a relatively high price is received for low grade barley. This is worth something like 1c. per lb. on the market, or around 60¢@62c. per bu., while oats are selling at 1½c. per lb. or better. A quantity of cheap barley is mixed carefully with a much larger quantity of oats, and upon its arrival sells as oats, hence the barley whose identity is thus lost, commands the oat price on the 32-lb. basis.—*Cincinnati Price Current*.

June, July and August.

The most charming Summer Resorts, of which there are over three hundred choice locations, are to be found in Wisconsin, Iowa, Minnesota, South Dakota and the Peninsula of Michigan, along the lines of the Chicago, Milwaukee & St. Paul Ry. Nearly all are located near lakes which have not been fished out.

These resorts are easily reached by railway and range in variety from the "full dress for dinner" to the flannel-shirt costume for every meal.

September and October.

The finest shooting grounds in the Northwest are on and tributary to the lines of the Chicago, Milwaukee & St. Paul Ry. The crop of Prairie Chickens will be exceptionally good this year; also Ducks and Geese. In Northern Wisconsin and the Peninsula of Michigan splendid Deer shooting is to be had. Full information furnished free. Address, GEO. H. HEAFFORD, Gen. Pass. Agt., Chicago, Ill.

THE RIGHT TO REPAIR PATENTED ARTICLES.

WE HAVE heard the question repeatedly raised by railroad men of late: Can we have patterns made to renew the parts of broken car-couplers without obtaining permission from the patentee? This matter has been definitely settled in the courts in relation to other patented devices. The rule laid down by the United States court is: "Where a patent covers as an entirety a machine composed of several separate and distinct parts, the purchaser of such machine from the patentee will not infringe by replacing such parts as wear out, as often as necessary, so long as the identity of the machine is retained. But if the patent is for a separate and distinct element of the combination, a purchaser will infringe by replacing such element."

This means that if the knuckle, for instance, should be the only patented part of a coupler, or, if it should be covered by a separate patent, it would be illegal for a railroad company, or an agent acting for them, to make new knuckles; but if the knuckle is merely a part of the patented coupler, new ones may be made for repairs without infringement of the patentee's rights. In cases where the railroad companies can legally make pieces to repair a patented article they are at liberty to employ other manufacturers to do the work, or any one in its employ, is under no obligation to use the same kind of materials in repairing as were used in the original manufacture, and these may be replaced by better materials.—*National Car and Locomotive Builder.*

IDEAS ON MACHINERY ADVERTISING.

SUPERIOR mechanism and systematic and persevering methods of advertising are the essential elements for the attainment of the greatest success in the machinery business.

I have in my mind one concern which grew from a very small beginning to its present greatness in a few years through the application of these adjuncts. Not one of its customers has ever seen a representative or drummer offering its productions, for they are sold only through the influence of the newspapers and trade journals. This is the age for "something new," and the master spirit guiding the mechanical department is alert to find out the wants of the possible customer. The merits of new machines also need to be presented through effective and thorough advertising. My argument is, that both the mechanic and the advertising man must display more than ordinary experience and intelligence to bring forth the best results.

In days past it was thought important to dress the machine with colors and stripes to please the eye. Now the machine that does the best work is the one that sells the best, and rarely is one seen with other than an ordinary coat of steel colored paint. This change was wrought entirely through the effectiveness of advertising. It was thought that the additional expense of fancy painting could be done away with, the labor and expense saved, and the money invested in advertising. In time the public became convinced that paint was not so desirable a feature, after all; what was wanted was machinery to do its work in a manner to secure the highest efficacy.

All readers of newspapers do not buy wood or iron working machines. Some

do; not many. Sellers of most goods have buyers of some kind at all times. Their eyes can be caught by an advertisement worded with special attractiveness; but the man who wants a machine for a certain purpose must have it brought to his notice in the shape of a handsomely engraved cut displaying its valuable points. The better the cut, the quicker the perception of its usefulness is reached. The machine must have value or the advertisement is lost.

There are many machinery buyers who have some slight knowledge of machinery, but who have made their money in other business than the one they expect to engage in. With them, too, comes the value of a superior engraving. They are impressed with the quality of the work and the skill required in its execution; thus the first attack is won.

The next is a description stripped of all unnecessary verbiage, written so plainly that a child of passing understanding can almost realize the machine in actual operation. It must be shown in its best light and position, with the parts numbered or separately shown; this appeals to that sense of desire to study out from the description what lack of comprehension they may have of it. Then comes the correspondence to sell it. That is strictly office work and not in the advertising line. To bring the customer to the office or to have him mail his letter for further information is where the advertising man stops. Of course, it is understood a conspicuously displayed advertisement cannot by any means be overlooked. It is just as much required as a printed letter-head.

Reading notices which are adroitly written and compactly worded assist towards securing correspondence. By all means bring the "something new" forward at every opportunity and hit the nail hard, not once, but often, to drive it home. While admitting that all men have not the special aptitude for getting the best returns through the medium of newspaper circulation, there can still be a decided improvement shown by the machinery builders in their advertising. We all agree that the advertising man is the mainstay of a growing business, and his connection with it becomes so close that he is not to be classed with the ordinary clerk.—*James T. Brown, in Printer's Ink.*

BRITISH SENTIMENT.

The Liverpool Corn Trade News, remarking on an entertainment of the American millers in that city, said: "An occasional exchange of hospitalities by the various branches of commerce and manufacture between the two great English-speaking people, would do more in the interest of universal peace and the furtherance of substantial and material progress than all the acts of Parliament and Congress, or the standing armies of the continent duplicated. The united voice, wealth and resources of the hundred million English-speaking people would hold the brawling nations of the world spellbound."

A LARGE number of American millers have just arrived in this country. Without doubt their errand is to spy out the nakedness of this used-up old land—at least, in the matter of improved milling appliances. Within the last few years, however, our larger flour mills have been considerably improved, and some of them have been

fitted with much of the best machinery and most recently discovered advantages that skill and long-trying experience could suggest. Thus, even in Scotland, we can show some recent developments in milling enterprise which, though we hardly expect that they will make an advanced American miller open his eyes wide with astonishment, should at least moderate their contemptuous feelings for our puny, one-horse affairs compared with their magnificent milling concerns. Perhaps if our American milling cousins did not get their splendid water-power so cheap they would hardly be able to bounce so much about their large flour factories. Still, if our millers are unable to show them extensive ranges of granaries and buildings, often ten or twelve stories in height, perhaps they may be able to show them some samples of their make of flour which the Yankees will find it difficult to beat in color or quality or silkiness of dress. In any case, we trust the American millers will thoroughly enjoy their trip. We can show them famous cities and old historic scenes. They have nothing of this character in all the surrounding vastness of their boundless prairies, or amid the raw and unfinished urban centres where heterogeneous populations cluster together. We suppose a good many of the party, especially if they are accompanied by their lady kind, will not fail to replenish their stock of toggery with two or three suits of new clothes, and save as much on the Custom-house duty which they will shirk the payment of as about cover the whole cost of their trip. If they could so arrange their tariff as to ensure a similar bounty to travellers from this country visiting America, a good many of us would be quite willing to return the visit in the fall of the year.—*British Baker, Confectioner and Purveyor, London and Glasgow.*

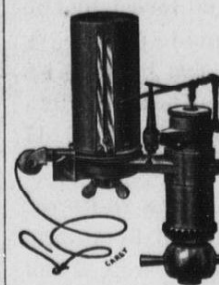
THE people who live in this golden age have much reason to be thankful for the abundance of all kinds of food at very moderate prices. If farmers are not satisfied with the price they get for their wheat, the people, at least, have no cause to grumble at its dearth. And not only is flour to be had at reasonable figures, but the quality, generally speaking, is exceptionally fine. In color, flavor, and nutritious qualities the flour and the bread placed within the reach of the poorest as well as the richest in the land, were surely never surpassed in the history of flour-milling and bread-baking. Time was, in some parts of England, at least, when there was an inducement to vamp up inferior qualities of flour with alum or other deleterious substances; but such is not now the case. Low grades of flour, even of good quality, are not readily sold, nothing but the "pick of the pack" being usually wanted. Flour that has in any way been injured in quality by accident or otherwise can scarcely be disposed of for any purpose whatever; it mostly has to be used up in some cattle-feeding mixture. Just lately, at a meeting of the Kidderminster Town Council, the Health Committee reported the seizure of 418 sacks of flour at the railway station, and its condemnation as being unfit for human food. It seems that the flour had been temporarily placed in a shed in the railway yard, near where the manufacture of artificial manure is carried on. The owners, however, are to be permitted to use the flour for dog biscuits, pig feed, or purposes other than for

American Steam Gauge Co.

—SOLE MANUFACTURERS—

Bourdon Steam Gauges

WITH LANE'S IMPROVEMENT.



THOMPSON'S

Improved Indicator

Over 2,500 in Use.

AMERICAN POP SAFETY VALVES

For Locomotive, Stationary and Portable Boilers, and Instruments incidental to the use of Steam. Send

for Price List I.

36 Chardon St., BOSTON, MASS.

Send for Catalogue K.

human consumption, and we presume that they will have a good claim against the railway company for any loss in consequence.—*British Baker, Confectioner and Purveyor.*

THE following appears in *Digest of Decisions of the Commissioner of Patents and of United States Courts*:

Word "Vienna" as Trade-Mark for Flour.—The word "Vienna" declared entitled to registration as a Trade-Mark for flour, it appearing that no flour made in any town called "Vienna" in this country has been placed upon the market under the name of "Vienna"; that no flour is upon this market coming from Vienna, Austria; that the word was arbitrarily selected by the petitioner, and that it is the custom in the flour trade to use fanciful names to designate flour, rather than the names of places of production.

Same—Foreign Commerce as a Basis of Registration.—While the fact that flour from Vienna, Austria, is not on sale upon this market would not of itself authorize registration, when foreign commerce is invoked as a basis of registration, it does not appear in the present case that flour from Vienna, Austria, has any reputation in the markets of the world or that the word "Vienna" would indicate to a purchaser that the flour upon which it was used came from that city.

THE REACH AND SCOPE OF INTELLECT.—Every man is fitted to fill some position of importance. Every man's mind is more or less expansive, more or less reaching, more or less comprehensive. The man who loves his professional ways possesses an inquiring mind; he is judiciously inquisitive; he guides his inquisitiveness in the line of his profession; he is a learner and a teacher. If he becomes a mark among men, the mark is always in proportion to his success. If he confines his investigations to a scientific line, he discovers and applies the truths which govern his operations. This makes him a successful man; if a farmer, he is ready for all emergencies, he succeeds because he understands nature's laws and her demands. His crops are always fair, almost always good, generally superior, and he flourishes like a green bay tree.—*Ex.*

A GERMAN engineer has devised a new method for fixing a foundation under water. By means of a powerful blast of compressed air he drives powdered cement down into the sand or mud at the bottom of a stream. The action of the water immediately fixes the cement, and it becomes like solid rock.

MANUFACTURING SITES FOR SALE!

The undersigned owns a few of the *best* manufacturing sites in the city of Milwaukee, adjoining those now occupied by the *Milwaukee Car Wheel and Foundry Co.* and the magnificent plant of the *Fuller-Warren Stove Works* which cover nearly ten acres of ground. Best of railroad facilities. Parties desiring a suitable location should investigate this. Address,

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THE IMPROVED WALSH Double Turbine Water Wheel

Patent Cylinder Gate.
Easy working.
Positively no leakage.
Shipped on
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More power with
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RUBBER STAMPS, Seals, Burning Brands, Advertising Plates, Steel Letters and Figures, Badges, Door Plates, Checks, Type, Inks, all colors, Name Plates, Stencil Dies and Outfits, Gold Pens Re-pointed, etc.

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SOME eastern millers are making war on grocers for selling outside flour when it can be had at lower prices than local flour. They evidently do not consider that they do business on a very similar plan themselves, whenever an opportunity presents itself. While generally using local wheat, it is solely done on the ground of economy, and the miller who would hesitate to purchase wheat outside, if by so doing he could secure better grain, or buy at a lower figure, would be very difficult to find. Then again, it is not an unusual thing for them to offer their surplus flour at cost or even below cost in wholesale centers, and they sometimes job it out to outside grocers at less than home prices. In this way they are often the means of inflicting the same injuries upon other millers as those of which they make such loud complaint. If, instead of protesting, these millers would advertise their brands more, they might obviate the difficulty to a great extent, provided the flour is kept up to a desirable grade and offered at reasonably low figures.—*Grocer and Country Merchant.*

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WILL SELL or take partner in a 100-barrel steam flouring mill, fitted with the best and latest improved machinery, situated in the best wheat belt of Nebraska. Does a very large exchange business. Has sidetrack which facilitates shipping and gives excellent opportunity for conducting elevator business. Has a large cash trade, and is located so as to control flour market of Northwestern Nebraska, Northern Wyoming and Southern Dakota. Address,

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6-3t

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PIECE OF MILL PROPERTY, 25 acres, two houses, with a twenty-two foot fall of continuous, unfailing spring water supply. This property is within a few rods of the West Shore Railroad and in a great custom business vicinity. Will advance money to rebuild on small payment. For particulars address,

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FOR SALE—One-half interest in a full roller mill, 50 barrels capacity, located in railroad town of 500 population, doing a splendid business and making money. Best of reasons given for selling. An excellent chance for a practical miller with small capital. Address,

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To close out a partnership, we offer for sale our 50-barrel Richmond City Mill Works' short system roller mill, located at Mitchellville, Tenn., and enjoying good exchange trade. Two members of the firm engaged in other business is the reason for selling. Write for full description. Reduced R. R. fare on July 4. Address,

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FOR SALE—REAL ESTATE.

Lot 84x127, Merrill Park, cheap.
Lot 78x150, Wells near Twenty-Seventh Street.
House and lot 40x150, on Fifteenth Street.
House and lot 35x140, on Eighteenth Street.
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House and lot 30x135, Seventeenth Street.
House and lot 60x200, Grand Avenue.
House and lot 60x140, Twenty first street, cheap.
Lots in Murray Hill, Greystone Park, Oakland Heights, Fairview, Euclid Park, Phoenix Park, Aetna Park and Government Heights are for sale at low prices and on the same easy terms as heretofore, and they are bought by parties who intend to build nice homes. More than one-half of all lots in the above subdivision have been sold. It is unnecessary to use a club to convince anyone that sees these lots that they are sold at very low prices. If you want anything in the real estate line call on or write

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SECOND MILLER WANTED.

We want a good man as second miller for general work in our roller mill. Capacity, 75 bbls. Must be a German, and a married man preferred. Steady employment for the right man. For further information address or apply personally to

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5tf

MILLER WANTED.

A good miller, in a 50 barrel roller and stone mill, located in Wisconsin. One that knows how to dress stones. For further particulars address,

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MILL SITE FOR SALE.

In Marshall County, Kansas, on Little Blue River. Never failing water power. Mill burned recently and property will be sold CHEAP. 6½ acres of land, two dwellings, granary, barn, scales, wheels set in flume, ready to couple to, stone dam, walls of building still standing. For particulars address,

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WATERVILLE, KANS.

5-2t

FOR SALE—In Wisconsin.

125-bbl. roller flour mill, 4 stories, frame with stone basement, including plenty water power for 4 water wheels. Flume, dam and mill in good condition. Frame warehouse and office close by, and long sheds for farmers' team. The whole property in full operation 16 hours daily, doing profitable business. Has big grist business. City of 2,000 population; two railroads. Good trade with citizens, farmers and lumbermen, for flour, feed and rye. Good local grain, and plenty of it. Good place to live, has good schools and churches, and close to other large cities. Owner non-resident, which is the reason for selling. Address,

MENASHA WOOD-SPLIT PULLEY CO., Menasha, Wis.

4-tf

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A RARE BARGAIN. A FOUR-STORY BUILDING SITUATED ON GROUND 50x150.

Following is a list of the machinery: One Schwartzwalder Scourer; one Victor Brush Machine; one Cockle Machine and Steam Wheat Heater; one 9x18 Double Chain Odell Roll; one 9x30 Double Odell Roll; three 9x24 Double Odell Rolls, or breaks on wheat; four 9x24 Stone Rolls for Middlings, and three pair Middling Stones; three Garden Bits and five Smith Purifiers; one Three Break Scalper and sixteen Flour Reels; three Fitcher and two "Silver Creek" Centrifugal Reels; two Richmond Bran Dusters; one Hughes Ship Stuff Duster; one Bran Packer; four Flour Packers; one Five Ton Platform Suspension Scale; Barnard & Leus' Separator to Grain Bins.

The above machinery is all of the latest improved, and has been run very successfully. Capacity of mill, twenty-four hours, 350 barrels. Driven by one 18x42 Reynolds' Corliss engine and one 180 H. P. Heine safety Boiler. If desired, we will take pleasure in furnishing a more minute description, with price, terms, etc. The mill is situated on Fifth and Center streets, Little Rock, Ark. A bird's-eye view of Little Rock, showing location of mill, will be sent on application. For further particulars address,

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A 25 horse-power Reynolds Corliss engine, with 40 horse-power boiler and heater and connections, all in first class condition and in use at present. To be delivered in July, 1891. A bargain for anyone in need of same. Reason for selling, more power required. For further information address,

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Position as traveling flour salesman in the Eastern states or cities. Applicant is a thoroughly well informed flour salesman and acquainted with the dealers and wants of the east.

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RECENT MILLING PATENTS.

The following list of Patents for Milling and Grain Handling Appliances, granted in May, 1891, is specially reported for the UNITED STATES MILLER AND MILLING ENGINEER by H. G. Underwood, Patent Attorney and Solicitor, No. 107 Wisconsin St., Milwaukee, Wis., who will send a copy of any patent named, to any address for 25 cents.

No. 451,542, Dust-collector, Rama R. Waters, Akron, Ohio.

No. 451,543, Dust-collector, Rama R. Waters, Akron, Ohio.

No. 451,580, Grain-scourer, Charles Rippin, St. Louis, Mo.

No. 451,670, Attachment for fanning-mills, John Herson, Port Huron, Mich., assignor to Sidney Cole, William H. Burgess, Frank McKenney and James H. McKenney, all of Crosswell, Mich.

No. 452,065, Grain sieve, John S. Rowell and Theodore B. Rowell, Beaver Dam, Wis.

No. 452,191, Frame for Conveyer-belts, Revilo Oliver, Chatsworth, Ill.

No. 452,434, Grain-scourer, Allen C. Branthingham, Winfield, Kans.

No. 452,580, Separating-machine, Orville M. Morse, Jackson, Mich.

No. 452,581, Separating-machine, Orville M. Morse, Jackson, Mich.

No. 452,702, Mill-race fender and screen, Phares R. Grabill, Millersburg, Pa., assignor of one-third to John R. Grabill, same place.

No. 452,812, Bolting-reel, Ferdinand P. Trautwein, Lutesville, Mo.

No. 452,958, Composite-Millstone, Thomas L. Sturtevant, Framingham, Mass., assignor to the Sturtevant Mill Company, Boston, Mass.

No. 452,959, Composite-Millstone, Thomas L. Sturtevant, Framingham, Mass., assignor to the Sturtevant Mill Company, Boston, Mass.

No. 453,068, Grain-meter, Lincoln L. Sharp, Douglas, Nebr.

THEORY AND PRACTICE.—No expression is more common among mechanics, than, "The thing is all right in theory, but when it comes to apply it to practice it won't work." The fact is, that if the theory of a thing is all right, and that theory is correctly applied in practice, it will surely work, and when a thing fails to work, either the theory or the practice, or both, are wrong.

When the theory of a thing has been developed as far as it seems possible to develop it, and it seems to stand the test of mathematics and of all the other sciences which can be brought to bear upon it, including that which has its final expression upon the drawing board, and still the machine or process, when actually tried, fails to work, the temptation is strong, as we well know, to declare that the thing is perfect in theory but that practically it will not work. It is the frequency of such expressions, no doubt, more than anything else, which has created the very general feeling among practical mechanics, of distrust if not contempt, for what they call the "impractical theorists," and the belief that mere theory is of no account whatever; whereas, as a matter of fact, correct theory has been in the past, is now, and probably will continue to be, of the greatest importance in the development of the science and practice of mechanics.

It is to be considered that practice is by no means perfect, and the "practical man" needs to remember this when disposed to blame theory for the failures otherwise unaccounted for. No one has ever yet seen a perfect shaft, or gear or screw, and it is not probable that any one ever will, while it is probable that many theories regarding mechanics are much nearer perfection than practice will ever get.

When correct practice is based upon correct theory in the building of any machine, that machine will be correct, and will work correctly, and when the practice is known to be correct, and the machine will not work correctly, then it cannot be correct in theory. Neither a machine nor anything else can be correct in theory and wrong in practice.—*American Machinist.*

ALL persons desiring to reach the entire milling and grain trade of America, by circular or otherwise, should obtain a copy of CAWKE'S AMERICAN FLOUR MILL AND GRAIN ELEVATOR DIRECTORY FOR 1890-91.

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Cleveland, Cincinnati, Chicago & St. Louis
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Through Tickets via the Big Four Route can be procured at all Ticket Offices in the Northwest.

O. G. MURRAY, Traffic Manager. D. B. MARTIN, Gen'l Pass'r Agent.
CINCINNATI, O.



This is not a puzzle, neither is it a theorem in geometry, it is merely intended to call attention to the fact that the WISCONSIN CENTRAL LINES form the direct route between Chicago and Milwaukee and the points named above. Through Fast Trains with Pullman Vestibuled Drawing Room Sleepers. Meals served in the "Central's" famous Dining Cars.

For tickets, Sleeping Car reservations, time tables, etc., apply at City Ticket Office, 99 Wisconsin Street, or at New Passenger Station, Fourth Ward Park.

"THE FINEST ON EARTH."

The Cincinnati, Hamilton & Dayton R. R. is the only line running Pullman's perfected safety vestibuled trains, with chair, parlor, sleeping and dining car service between Cincinnati, Indianapolis and Chicago, and is the only line running through reclining chair cars between Cincinnati, Keokuk and Springfield, Ill., and combination chair and sleeping car Cincinnati to Peoria, Ill., and the only direct line between Cincinnati, Dayton, Lima, Toledo, Detroit, the lake regions and Canada.

The road is one of the oldest in the State of Ohio and the only one entering Cincinnati over twenty-five miles of double track, and from its past record can more than assure its patrons speed, comfort and safety. Tickets on sale everywhere, and see that they read C. H. & D., either in or out of Cincinnati, Indianapolis or Toledo. E. O. MCCORMICK, General Passenger and Ticket Agent, Cincinnati, Ohio.

BOMBARDED THE TOWN.—Three years ago, says a Kansas City correspondent of the *Chicago Times*, Henry Singleton, aged 50 years, with an intellectual cast of countenance, but with an eye which showed instability of mind, went to Seneca, Kas., and bought the old flour mill half a mile from the town. He made no flour, although the engines were often heard running, but lived in the mill, admitting no visitors, and explained that he was making a flying machine. The impression that the fellow was a harmless crank was dispelled last night when he commenced a bombardment of the town.

At 11 o'clock, one day, L. L. Haggard was sitting in front of Hotel Cameron, when a crash was heard on the roof, and a round missile rolled down and struck him in the abdomen. Immediately another crash was heard across the street, and a fusilade was kept up, balls of burnt clay weighing five pounds striking every half minute and doing considerable damage in the west end of the town. Men armed with revolvers and shotguns started for the old mill and soon captured the man. The balls of which 800 were found ready for use, were thrown by a powerful and ingeniously-made steam catapult which carried a distance of a mile. The catapult has been viewed by hundreds of people to-day. On Singleton's person was a manuscript story in which he (the hero) is represented as conquering various cities with his engine of war. The man is in jail awaiting legal action.

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Flour Mills.

Corn Mills.

Hominy Mills.



THE KEYSTONE

4 ROLLER WHEAT MILL.

ST. FRANCIS, KAN., October 5, 1890.

THE J. B. ALLFREE CO., Indianapolis, Ind.:

Dear Sirs—In reply to yours, we have been running six weeks, and can say that your rolls are the best we have ever handled. They have not given us any trouble since we started, and the adjustments cannot be beaten, and the flour dressers and centrifugals are "daisies." They work just like a charm, and the cleaner and scalper do splendid work. They can not be beaten. All the other machinery, shafting, pulleys and everything is fitted up so nicely that there is no trouble to set it up. We can make fifty barrels of flour in 24 hours from No. 3 wheat. Our wheat is very poor and our flour is giving very good satisfaction, and The J. B. Allfree Co. is the best firm we ever had any dealings with. They did more than the contract called for. If we need any more machinery after this, they will get the order.

Yours very truly,

JENKINS & NEWBAUER.

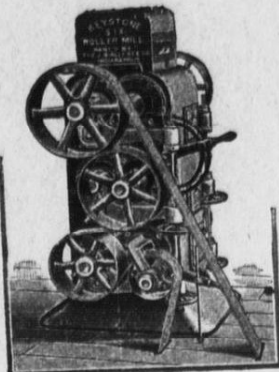
HAUBSTADT, IND., October 16, 1890.

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Gentlemen—In response to your inquiry of Oct. 15, would say we are pleased to state that we have run the mill about three months and are doing first-class work, and think you ought to brand all your machines the same as you do your bolter "Success." We have this day mailed you a sample of our Climax Patent, of which we make 75 per cent. Beat it if you can.

Wishing you success, we remain your friends,

ZILIAK & SCHAFER MILLING CO.



THE KEYSTONE

6 ROLLER CORN MILL.

Address, THE J. B. ALLFREE MFG. CO., 76 to 86 Shelby St., INDIANAPOLIS, IND.

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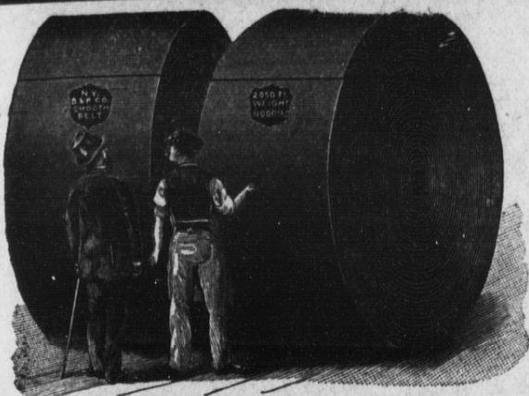
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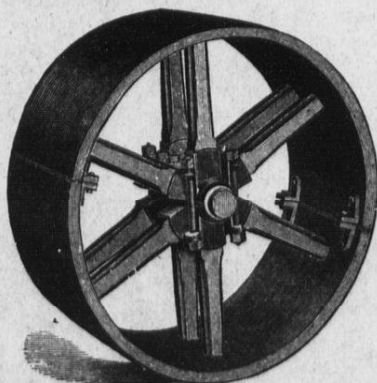
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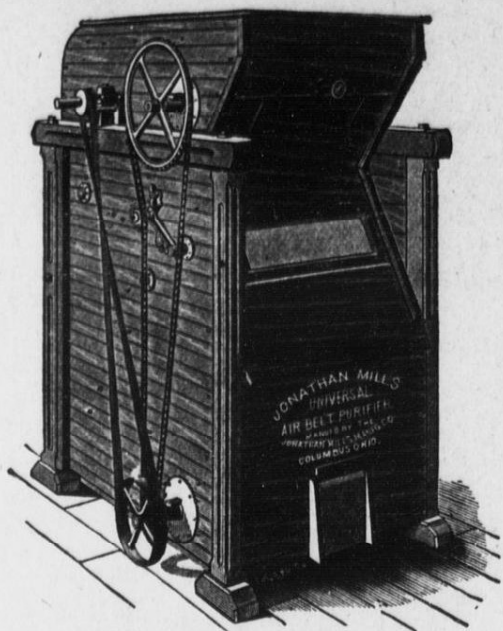
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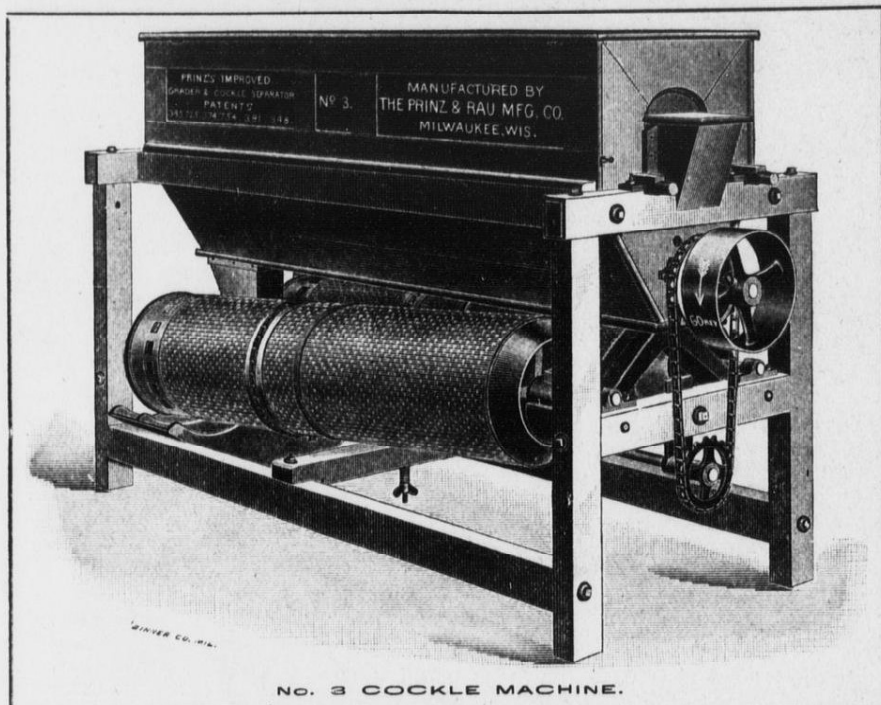
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Gentlemen—You will find enclosed check for \$... which we cheerfully send you. The Purifier more than meets our expectations, does much better work than we had any idea it would. Our Mr. Lockerbie wrote you a few days ago, and if you will give us the same guarantee on that stock that you did on the other, please send the Machine along at once, as we cannot afford to be without it. Yours truly,
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Respectfully,

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OFFICE OF THE SEIBERLING MILLING CO.

THE BRADFORD MILL CO., Cincinnati, Ohio:

Gentlemen—Yours of yesterday received, and I wired you this morning "yes," as per your instructions. The sketch is all right. Make the Conveyor good and strong.

I told Mr. Near that he need not have cloth sent with the Dunlap Bolt, as I have the one here that was used in the test. I will use same numbers on the new machine.

Respectfully,

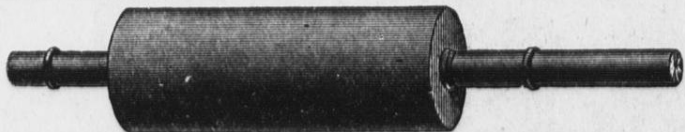
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